

FORMULA STUDENT

Institution of
**MECHANICAL
ENGINEERS**

Who's Who

Judges, Officials and Volunteers 2012

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Our thanks go to the 246 judges and volunteers who have given up their time to help at Formula Student 2012. We would especially like to thank everyone who has marked reports and helped during the run up to the event. Without all their help behind the scenes, Formula Student couldn't be the success it is today.

Formula Student Staff and Officials



Fiona Pawley
Project Manager

This will be Fiona's inaugural Formula Student event and she is really looking forward to meeting the teams, volunteers and judges. Before joining the IMechE Fiona studied Business Studies at Kingston University. Since graduation she has worked for Stephane Ratel Organisation, motorsport promoter, organising motor racing events around the globe.



Fiona Edgeler
Project Assistant

Fiona has been involved in Formula Student for five years since graduating from the University of Bath. She has travelled across Africa, Thailand, Australia and Fiji. Fiona is looking forward to meeting teams from across the world at Formula Student 2012!



Rebecca Clarke
Judging and Volunteer Co-ordinator

This is Rebecca's second year at Formula Student co-ordinating all the judges and volunteers. Before joining the IMechE Rebecca studied Law at the University of Southampton, then undertook a Postgraduate Diploma in Events Management. She is looking forward to seeing all the volunteers again and watching the cars on the track.



Neil Carr-Jones
Event Manager - Goose Communications
FS Operations Co-ordinator

Neil is an Event Manager at Goose Communications, a company specialising in corporate and motorsport live events. Goose is contracted by the IMechE to manage all logistics for the dynamic activities and liaison with the Silverstone circuit and suppliers of catering, marquee and other services. He has fulfilled this role since the year 2000 and is also a member of the Formula Student Planning Committee.



Dr Andrew Deakin
Chief Development Engineer - Flybrid Systems LLP
Vice-Chairman

Andrew founded the first European Formula Student/Formula SAE team back in 1995 and was one of the founders of the UK Formula Student competition. In 2001 he graduated from Leeds with a PhD in Vehicle Dynamics. Since then has worked at the Renault F1 Team and now Flybrid Systems LLP where he is the

Chief Development Engineer.



Richard Folkson
Chief Judge

Richard has worked for Ford Motor Company for 30 years in Product Development including Project Manager of the original Ford Focus, two recent Ford Transit Programs and Chief Engineer for Technical Alignment / Global Standards with responsibility across Ford, Jaguar Land Rover, Aston Martin, Volvo and Mazda. Richard is a past Chairman of the Institution of Mechanical Engineers

Automobile Division, Vice-Chairman of its Eastern Region and an RAEng Visiting Professor for Innovation and Design.



Jon Hilton
Managing Partner – Flybrid Systems LLP
Chairman

Jon has been involved with Formula Student for many years first as a Design Judge and then as Chief Judge before taking over as Chairman of the competition organising committee in 2009. Now Managing Partner of Flybrid Systems LLP Jon has previously spent 17 years working in senior roles

with a number of Formula One Teams including Renault F1 where he was Technical Director – Engine Division. He is also a past Chairman of the Automobile Division of the Institution of Mechanical Engineers.



Dan Jones
Chief Designer - Flybrid Systems LLP
Chief Technical Scrutineer

Dan is Chief Designer at Flybrid Systems LLP and is Head Technical Judge at Formula Student. He competed with the University of Hertfordshire in 2004 and 2006, and has remained involved with Formula Student ever since.



Andy Ringland
Director - BCM Consulting
Chief Event Captain

After competing with Lancaster in 2005 Andy graduated with an MEng (Hons) and commenced employment as a Building Energy Design Consultant with BCM where he has progressed rapidly through his career to achieve Chartered status and join the board of directors. After a year off from Formula

Student (the competition was hard work!), Andy returned to be a Technical Scrutineer. Now, volunteering for his sixth year he is fulfilling the role of Chief Event Captain. His main aim is to create a base of experienced volunteers who encourage the development of young professionals and ex-competitors to enable them to run the events in future years and provide the continuity critical to maintaining the high quality competition that FS has become.



Samantha Ward
Project Manager - Goose Communications
FS Operations Co-ordinator

Samantha is a Project Manager at Goose Communications, a company specialising in corporate and live motorsport events. Sam a self-confessed 'petrol head' who has been lucky enough to have been working within the Automotive events industry since 2004. Her key areas of expertise are: live event

management, event logistics, dealer product launch training and event road shows. Sam has enjoyed working with a large number of premium brands and volume manufacturers worldwide, such as: Audi Canada, Volkswagen USA, Volkswagen Group UK, Peugeot, Citroen, Renault and Kia Motors.

Head and Deputy Head Judges



Neill Anderson
Technical Advisor - National Transport Authority
(Taxi Regulation)
Head Design Judge

Neill is an automotive engineer with motorsports experience as driver, team organiser, regulations author and also in car manufacturing. He has spent the previous 20 years with TVR Sportscars and is currently working in a Government regulatory body.



Elliot Brinkworth
Assistant Head Business Strategy & Governance
- Ministry of Defence
Deputy Head Business Presentation Judge

Elliot was part of the 2000 Leeds University FS team.

Since graduation he has worked for the Ministry of Defence procuring equipment, advising on the Department's project management policy and business transformation. He currently works in the

Department's Corporate Finance team in the London Head Office. Elliot has been involved in Formula Student for many years and is currently the Deputy Head Presentation Judge



Darren Cashman
Cost Estimator - Ford Motor Company
Deputy Head Cost Judge

Darren has worked in the automotive industry for 26 years, areas include manufacturing, design and development and finance. He studied at university whilst in full time employment and achieved a 2.1 (hons) degree in Manufacturing Systems Engineering.

Darren has been involved in Formula Student since 2007, became a cost team leader in 2008 and Deputy Head Cost Judge in 2009.



Richard Hale
Business Analyst - Ford Motor Company
Head Cost Judge

Richard has been working in industry as a cost estimator for 10 years. He has undertaken extensive studies in engineering and estimating and supported Formula Student since 2006 as a cost judge. From a young age, Richard has had a keen interest in engineering and motorsport from and is a member of the Enthusiast Car Club, supporting events around the country at many motorsport locations including Silverstone.



Alex Hickson
Senior Development Engineer - Lockheed Martin
UK Ampthill
Deputy Head Design Judge

This is Alex's third year as Deputy Head Design Judge for Formula Student, making a total of 16 years in the Formula SAE Engineering Competition. Alex attended the 1st Formula Student Event competing as Technical Director of the University of Birmingham Race Team. His career started as a Design Engineer at Landrover and has included racing engine development, F1 composites and the design and development of wind turbines. He then became Technical Manager of a research program at Lockheed Martin UK Ampthill to develop light heatshield materials to support sample return missions for the European Space Agency and is now Technology Manager at GKN Aerospace.



Craig Powers
Control Engineer - GCOpt
Head Presentation Judge

Craig gained a First degree in Electrical Engineering, UMIST 1984, and a second BSc in Mechanical Engineering, from the Open University in 1999. Cars are his passion, and when his work schedule permits Craig competes in UK hillclimbs and sprints. Currently he runs a ZZR1100 engined OMS2000M and therefore has experience of bike engined formula cars. Craig has been involved with Formula Student UK since 2003 and Formula Student Germany since 2006, as both a design judge and a presentation judge.

Business Presentation

Ayotunde Adebajo

Mechanical Design Engineer- Sellafield Ltd

Business Presentation Judge and Dynamic Event volunteer

TJ graduated from the University of Liverpool in July 2006 with a Masters in Mechanical Engineering, where he participated in the Formula Student Competition as a student in 2005 and 2006. During both competitions TJ was the team manager and was also responsible for establishing the handling characteristics of the car during design and the assembly of the car post manufacturing. TJ currently works for Sellafield Ltd as a Chartered Mechanical Design Engineer, where his main area of focus is mechanical design and project management, and is responsible for initial concept development and project delivery.

Richard Atkins

CEO - Richard D Atkins & Associates

Business Presentation Judge

Richard was part of a R&D team for F1 engines during the 1960's and has taken part in many World rallies. He is a previous senior consultant at Ricardo Consulting Engineers and is a consultant to Fiat Abarth and Auto Delta. Richard has also been a Formula Student Supervisor for four years.

James Barry

Group Leader - Jaguar Land Rover

Business Presentation Judge

James graduated from Warwick University before joining Jaguar Land Rover in 2002. He held a number of positions in Body Engineering before moving into Infotainment as Audio Group Leader in 2011. He has been a Chartered Engineer since 2006 and has judged at Formula Student for the past four years.

Dr Peter Bell

Managing Director - Trapeze Group

Business Presentation Judge

Peter is a software engineer with a PhD in image processing. Before his current job, Peter worked for Grontmij as ITS Director and also for Cambridge Consultants as Commercial Director for Automotive and Transport. There he led projects developing new systems for cars including Cambridge Consultants' innovative automotive radar.

Mark Bridgeman
Platform Director - Johnson Controls
Business Presentation Judge

This is Mark's fifth year of judging at Formula Student. Mark has worked in the Automotive Industry for 30 years, mainly as a Tier 1 Supplier focusing on Programme Management, Business Development and Design and Development. At present he is employed by Johnson Controls as a Platform Director responsible for activities with Jaguar Land Rover on Seats and Interior Trim.

Lawrence Butcher
Editor - LBPerformance
Business Presentation Judge

Lawrence previously covered Formula Student for Racecar Engineering magazine for three years. He is currently the editor of 24Hr Race Technology, Cup Race Technology and Drag Race Technology magazines for High Power Media. Previously, Lawrence was a staff writer at Racecar Engineering.

John Butler
Engineering Consultant – Independent
Business Presentation Judge

After a career in international business development, both with a major automotive 1st tier supplier and as an independent consultant, John has transferred his skills to working with the IMechE. Currently he is Chairman of Midland Region for the Institution and also acts as a Professional Development Consultant. In this latter role, he is keen to help young people through their engineering careers. John's interest in promoting engineering is shown by his involvement with the Greenpower programme, Imagineering and Formula Student – where he will be judging for the 4th time this year.

David Cane
Business Operations Manager - Unilever UK
Business Presentation Judge

Currently, David is a Business Operations Manager at Unilever UK. From 2002-2005, he was a Product Development Engineer - Chassis at Jaguar Land Rover. David is a previous Formula Student entrant and competed with UBRacing (Birmingham University).

Paul Chapman
Design Engineer - Babcock International Group
Business Presentation Judge

After graduating from Oxford Brookes University with a postgraduate MSc in Motorsport Engineering in 2008, Paul joined Babcock Marine &

Technology Division in Plymouth as a Mechanical Design Engineer. Over the past four years he has worked on design projects ranging from Royal Navy warships, armoured vehicles and even super yachts. He has previously competed at Formula Student with both Swansea Institute of Higher Education and Oxford Brookes from 2006-2008. Last year was Paul's first year as a Business Presentation judge.

Naveed Choudry
Managing Consultant – Pcubed
Business Presentation Judge

Naveed is a Chartered Engineer with a proven track record in Programme Management. He has previously been part of the Formula Student Business Presentation Judging team and brings over 15 years experience in design, development and launching automotive concepts into mass production. Naveed has managed various complex programmes including new manufacturing facility set ups and business strategy developments for various sectors which include Rail, Automotive and Telecommunications.

Steve Clark
Design Engineer - Williams F1
Business Presentation Judge

Currently working in the historic vehicle business, Steve is concentrating on keeping pre-1940 Rolls-Royce cars alive. His previous experience has included programme management for performance engine development and power train programmes, as part of Tom Walkinshaw Racing group. Steve has also been involved for many years in motorsport through the Formula Renault teams and driver management. Outside of work, Steve is running an MG Midget in standard form in hillclimbs and sprints. This is his the second year of involvement in Formula Student.

James Colgate
Project Engineer - Williams F1
Business Presentation Judge

James was introduced to Formula Student whilst at Cambridge University reading engineering, there he competed for three years working on the design, but mostly manufacturing given his specialism in manufacturing engineering. After graduating he entered the City as management consultant providing operational and strategic advice to a range of technology companies. Building on the business experience he returned to engineering with his current position at Williams F1, he is currently working in project management and consulting to support their diversification into energy efficiency and hybrid performance vehicles.

Sam Collins
Deputy Editor - Racecar Engineering
Business Presentation Judge

Sam has been involved in the motorsport industry since 2007, and has a variety of experience, from building cars, to driving cars, to writing about cars and even selling cars. He is currently the Deputy Editor of Racecar Engineering magazine.

Dr Vincent Considine
Managing Director - Vee Solutions Ltd
Business Presentation Judge

After a previous career in high technology engineering, Dr Considine joined MIRA Ltd as Research Director where he led their customer funded and internally funded product research and development. He later led all of their business development activity promoting MIRA's advanced technology worldwide. After leaving MIRA, Dr Considine formed Vee Solutions Ltd to support clients in managing programmes, engineering and innovation capitalising, based upon his 30+ years experience in high technology environments. He has been supporting Formula Student as a Business Presentation Judge since 2003.

Jennifer Corbett
Operational Engineering Advisor- Sellafield Ltd
Business Presentation Judge

Jen competed at Formula Student in 2006 with the University of Liverpool. She has been a Business Presentation Judge since 2008 and is Vice Chair of the IMechE Young Members Board. Jen works for Sellafield Ltd, managing plant modifications and maintenance tasks as an Operational Engineering Advisor.

Andrew Cotton
Editor - Racecar Engineering
Business Presentation Judge

Currently, Andrew is Editor of Racecar Engineering, and has previously covered international endurance racing and touring cars for Sport Auto magazine in Germany, Auto Action in Australia and the Daily Telegraph. He worked as a freelance journalist in international motorsport for 15 years before taking up a full time post with the Chelsea Magazine Company in April 2011.

Russell Crow
Senior Technology Engineer - Network Rail
Business Presentation Judge

Russell has worked at Network Rail since graduating from Lancaster University in 2007. As a Senior Engineer within the organisation, he is responsible for the analysis and introduction of new equipment onto the

railway and was awarded Chartered status at the beginning of 2012. He is a keen motorsport enthusiast and has supported Formula Student as a judge since managing Lancaster's Formula Student team in 2007.

John Fisher

Retired - Fisher Marketing Ltd

Business Presentation Judge

John is a Chartered Electrical Engineer who in 1988 founded Fisher Marketing to provide PR and Marketing services to companies in the engineering and technology sectors. He has wide experience of motorsport, having marshalled at events from Formula Ford to the Grand Prix over many years. He is a full member of the RAC and in 2008 was the Master of the Worshipful Company of Marketors, the City Livery Company for Marketing professionals.

Alan Fitzgerald

Founder - Knowledge Transfer Associates

Business Presentation Judge

Alan has previously been part of Formula Student as a Business Presentation judge. He is a Fellow of IMechE and serves on the MID Board, as well as being involved for many years in Manufacturing Excellence. Alan has worked in the Machine Tool, Computing & IT, Engineering Consulting, M&A, and Marketing industries over the past 40 years, gaining extensive experience in the Automotive, Aerospace and Ship Building sectors. Alan now Consults and Mentors, for several Universities, working on their MSc Professional Engineering programmes in the UK, Africa and Indonesia.

Marc Fry

Director - Granta Design

Business Presentation Judge

Marc has an engineering degree from the University of Cambridge and during the past 11 years has held positions in engineering design, materials education and business development. He is currently the Director of Education at Granta and works with Professor Mike Ashby (University of Cambridge) and colleagues to support materials and sustainability education on engineering courses at over 600 universities. Granta also works with most global engineering companies and government research laboratories. Its main product, GRANTA MI is the leading software system for managing materials and environmental information across aerospace, automotive, energy, industrial equipment, and medical device and motorsport organisations.

Mark Hassall
Engineering Team Leader - BAE Systems
Business Presentation Judge

Mark competed in Formula Student in 2005 and 2006 whilst studying at the University of Manchester. Since graduating he has returned annually as part of the Business Presentation judging team at both the competition and the Learn to Win workshops. Now employed by BAE Systems, he leads a team of engineers who work closely with the UK MoD to develop upgrades for armoured vehicles in service with the British Armed Forces.

James Haythornthwaite
Analyst - Citigroup
Business Presentation Judge

James has been a competitor in Formula Student in 2010, as the project manager for Warwick University's Class 2 entry and in 2011 as the Project Manager for the Class 1 entry. During his time at Warwick University he achieved a Masters degree in Manufacturing and Mechanical Engineering with Business Management, gaining knowledge and experience in various industrial production techniques. Upon leaving Warwick University James started work at Citigroup in their Private Banking division as an analyst on their graduate programme.

Kayleigh Hembrough
Buyer - Jaguar Land Rover
Business Presentation Judge

Kayleigh Hembrough is a recent International Business graduate from Aston University. Having always had a passion for cars and motor racing she knew she wanted to work in the automotive industry. An interest in supply chain management whilst at University lead her to a job as an electrical production buyer with Jaguar Land Rover. Although new to the Formula Student world, she is excited by the opportunity to become further involved in the world of motor sport.

Stephen Hemmings
PhD Research Student - Brunel University
Business Presentation Judge

Stephen graduated from the University of Hertfordshire in 2008 with a Bachelors degree in Motorsport technology and a Masters degree in Automotive Engineering. Following this, he spent a year working in industry as a development engineer for Delphi Diesel Systems, developing common rail diesel systems for heavy duty applications. In late 2009 he joined the School of Engineering and Design at Brunel University as a PhD research student, predominantly working on diesel after treatment systems. He presented his most recent work at the IMechE conference: Internal Combustion Engines: Improving

Performance, Fuel Economy and Emissions.

Ashley Hobbs

Engineering Consultant – Atkins

Business Presentation Judge

Ashley is a Mechanical Engineering Consultant in the offshore Oil and Gas and offshore wind industries. He has worked for the Atkins engineering consultancy for over four years on a variety of design and analysis projects for industries including energy, defence and aerospace. Ashley represented the University of Nottingham at the 2007 Formula Student in Class 1 (200 series), and was a Business Presentation judge at the 2011 event.

Raymond Hodgkinson

Regional Manager - Messer Cutting & Welding GmbH

Business Presentation Judge

Raymond has worked for a machine tool manufacturer for the last 42 years in the UK, Australia and Germany. He has been involved in development, launch and marketing of technical products and engineering their manufacture. Raymond has been a Lead Member at Formula Student Germany for three years now.

Philip Hodgkinson

Student - Imperial College London

Business Presentation Judge

After a dual honours BA in politics and international relations, Philip went on to work as a financial consultant as well as in e-commerce marketing. Since May 2011 he has returned to student life, studying towards an MBA at Imperial College London.

David Lewis

Management Consultant – Pcubed

Business Presentation Judge

David is an experienced Management Consultant with experience in IT and Manufacturing Industries. He is currently working for a global manufacturing firm based in the Midlands.

Robert Marwood

Project Engineer - Sellafield Ltd

Business Presentation Judge

Robert graduated from the University of Durham in July 2009 with a MEng in Aeronautics. He joined Sellafield Ltd as a graduate and in his current role, is responsible for delivering designs for projects in the nuclear decommissioning sector. Robert is a keen motorsports fan and competes in MSA kart racing across the country.

David McGhee
Senior Policy Officer - Home Office
Business Presentation Judge

David read Mechanical Engineering and Automotive Studies at Sheffield Hallam University and graduated in 2003. He joined the Ministry of Defence engineering and science graduate scheme working on a range of projects across a variety of disciplines which included engineering design of military equipment; equipment support for Armoured Fighting Vehicles and technical analysis in support of policy making. In 2010 he moved to the Home Office and now works as a senior policy officer.

James Miller
Development Engineer - MAHLE Powertrain Ltd
Business Presentation Judge

James graduated from the University of Bath in 2008, having been involved in the 2006 Bath Class 3 Formula Student entry. He now works at MAHLE Powertrain as a Development Engineer, where he spends time working in engine development focusing on performance development and emission testing.

Puneet Randhawa
Assistant Manager - Maruti Suzuki India
Business Presentation Judge

Puneet's first involvement with Formula Student started in 2009 with Team Fateh's second attempt at entering Formula Student. He is now an active mentor for new teams, providing advice in both the technical and financial spheres. Currently, Puneet is working as a costing and negotiating executive at Maruti Suzuki.

Dr Sheila Raynor
Research Strategy Coordinator - University College London
Business Presentation Judge

Dr Sheila Raynor gained her industry experience with NHS Innovations London where she evaluated potential medical and technical products for their commercial viability. In addition, she has assisted researchers at University College London to focus their ideas toward the commercial market. She has held Device Innovation Workshops which bring together both engineers and clinicians to design future medical devices.

James Russell
Programme Management Consultant – Pcubed
Business Presentation Judge

James is a Programme Management Consultant with over five years working with leading global manufacturing enterprises across Europe and is currently working for one of the large automotive manufacturers in the UK.

John Saville**Consultant - LAPOLLO****Business Presentation Judge**

John worked for Ford Motor Company for 30 years in a series of IT Management positions in Europe, developing real time systems to run Manufacturing Plants and introducing CAD/CAM across Product & Manufacturing Engineering and the supply chain. He was responsible for the development and deployment of Ford CAD/CAM system worldwide, including Ford, Jaguar, Mazda and the Supply Chain. He became CIO (IT Director) of the Jaguar Racing Formula 1 team. He was Deputy Chief Judge and a Presentation Judge at Formula Student for 6 years and has judged in US at Formula SAE and Formula Hybrid.

Arjen Schulpen**Project Engineer – Shell****Business Presentation Judge**

Arjen competed at Formula Student during 2003 and 2004 with the Delft team and now works for Shell.

Jonathan Smith**Partner – Pcubed****Business Presentation Judge**

Jonathan is a Partner with the global business transformation consultancy, Pcubed and has a wide background in engineering and manufacturing. He has been supporting Formula Student since 2009 and is delighted to support the event in 2012.

Jonathan Spencer**Business Improvement Engineer - Sellafield Ltd****Business Presentation Judge**

Jonathan has worked for Sellafield Ltd for five years as a site Improvement Engineer, gaining experience and qualifications in Lean Manufacturing and Six Sigma. 2012 will be his third year at Formula Student having participated as a Business Presentation Judge for the last two years.

Dr Brian Walker**Retired (formerly Operations Director - AEA Technology PLC)****Business Presentation Judge**

Brian worked in the process and nuclear industries before managing a wide range of engineering activities as an Operations Director. Now retired he is very active in the IMechE, being particularly involved in the professional registration of members and in the Manufacturing Excellence programme. He has been a Business Presentation judge since 2008.

Ian Wallbridge
IS Coordinator - Serco
Business Presentation Judge

Ian is currently working in IT first line support, but has had a varied career which has included marketing, engineering, and project management roles. His earliest involvement with motorsport was in event organisation whilst at Leeds University, and this led to a spell as a rally co-driver, working alongside two British Ladies' Champions early in their careers. Ian is a keen writer, and has contributed articles and blogs to a number of publications over the years.

Ian originally became involved with Formula Student in 2010, as a way of helping current students develop their potential, and is delighted to be back in 2012.

Cost

Charlotte Ahern

Finance Manager - Jaguar Land Rover

Cost Judge

Charlotte has been involved in Cost Judging for several years. She has worked in the automotive industry since 2004 and has built a car from parts.

Graham Bailey

Cost Engineering Group - Bentley Motors Ltd

Cost Judge

Graham volunteered at the first Formula Student event in the UK held at MIRA and has been a Cost Judge many times since. Having worked in the Automotive Industry for 36 years, he now looks after the Electrical/Electronic Cost Engineering Function for Bentley Motors. He's held various positions over the years including Senior Industrial Engineer with BL; Estimating Manager at DAF Group; Executive Engineer/Project Manager at MIRA; Cost Supervisor with Yazaki; Cost Engineering Manager at Lotus; Sourcing Manager at Goodrich Aerospace and Cost Control Manager at Tesla Motors. Graham is a member of the Engineering & Manufacturing Committee of the ACostE

Daniel Bodimeade

Quality Engineer - Jaguar Land Rover

Cost Judge

Daniel studied Motorsport Engineering at Coventry University and graduated in 2009. After University he spent two years gaining valuable experience in manufacturing and logistics/distribution before starting as a Quality Engineer at Jaguar Land Rover in July 2011.

Mike Bottley

Manager Vendor Tooling - Jaguar Land Rover

Cost Judge

Mike is a petrol head with 40+ years of industry experience and has been involved in the design, development and launch of countless new vehicle programmes. His particular involvement spans the complete life cycle of the vehicle's components from initial concept to 15+ years spares availability. His understanding of the unique balance of design, manufacturing process and material selection, which gives a whole life cost, leads directly into cost judging for Formula Student which he has enjoyed doing for over five years.

Julie Cheung
Cost Engineer - Rolls-Royce
Cost Judge

Julie's current role is a Cost Engineer/Modeller at Rolls-Royce, she is also completing her Engineering Doctorate in computational engineering and design at the University of Southampton. Julie's background is in aerospace engineering and this is her fourth year as a Cost judge.

John Connolly
Retired (formerly a Senior Cost Engineer)
Cost Judge

John is a Section Leader responsible for Cost Engineering investigations into original equipment and spares, on behalf of UK and other European and US Government departments. These investigations have included electronics, aero engines, various types of vehicles, armaments, nuclear plant and maintenance support. John has been a Cost judge for 11 years.

John Dangerfield
Contracts Manager - NHS Purchasing and Supplies
Cost Judge

This is John's 10th year as a Cost judge. He is a past Formula Student competitor from Brunel University and has also competed in both the German and Italian events as well as judging at FSAE California. John is a Procurement Contracts Manager with the NHS and controls purchasing for a wide range of services and sourcing of high value equipment for a group of hospitals in London.

Rowan Egan
BIW Facilities Graduate Engineer - Jaguar Land Rover
Cost Judge

Rowan studied Manufacturing Engineering with Management Science (BSC) at Trinity College Dublin and was recruited by Jaguar Land Rover in 2011 as part of their Graduate Program as an Advanced Manufacturing Engineer. He is currently heavily involved in the installation of production lines for upcoming new models, as part of the Body In White Facilities team which encompasses all of the car's underbody, framing and closures.

Marvin Eptom
Lead Test & Development Engineer - Lotus Cars
Cost Judge

Marvin has been involved in Formula Student for seven years, two years as a competitor with Loughborough University and five years as a Cost Judge. Marvin currently works for Lotus Cars as a Lead Test and Development Engineer. He is also actively involved in motorsport in the

UK as a race engineer for MacG Racing. MacG Racing are currently competing in the Britcar British Endurance Championship.

Lewis Harper

Current Manufacturing Engineer - Jaguar Land Rover

Cost Judge

Lewis graduated from the University of Liverpool in July 2011 with a BEng(Hons) in Electrical Engineering and Electronics. After graduating he started at Jaguar Land Rover working in manufacturing engineering, at the Castle Bromwich site, on the Jaguar XK. He is now a Current Manufacturing Engineer with Jaguar Land Rover.

Ben Horne

Cost Estimator - Ford Motor Company

Cost Judge

Ben has been working in industry as cost estimator for one and a half years, but also has 10 years experience in Prototype Engineering. He is currently studying for a BEng (Hons) in Manufacturing Engineering at CEME. Since a young age Ben has had a keen interest in engineering and motorsport and is an active member of enthusiast car forums. He has done track days on motorcycles at Donnington Park and Snetterton, and at Silverstone and Brands Hatch in cars.

Darren Horsley

Cost Estimator - Ford Motor Company

Cost Judge

Having had 24 years experience in manufacturing and engineering, Darren has built up a keen understanding of which requirements lead to Best in Class products. Understanding cost is vital for good product development, deployment and design. This is the second year of his involvement.

Jon Isherwood

Senior Projects Engineer - Britvic Soft Drinks

Cost Judge

This will be Jon's third year as a Formula Student cost judge - prior to this Jon was a team member with his university for four years where he designed and costed many different areas of the cars. Currently, he is working for Britvic Soft Drinks where he project manages the installation of new lean mass production lines.

Gareth Jones

Auditor - Ford Motor Company

Cost Judge

Gareth has been a Cost Judge at Formula Student for 11 years and has had the pleasure of seeing the competition grow in size and quality. He

has had 10 years experience racing production saloon cars and worked for Ford Motor Company for 33 years.

Helen Lloyd-Rainbow

Cost Estimator - Ford Motor Company

Cost Judge

Cost estimator for Ford Motor Company

Stephen Malyon

Cost Estimator - Ford Motor Company

Cost Judge

This is Stephen's first year as a Formula Student judge. Stephen has worked in engineering for 30 years and his career includes six years in plastic product and tool design, eight years in high speed packaging machine design, 16 years in automotive product design, project management and cost estimating. He has been involved in Motorsport for 25 years, initially Rallying, now circuit racing in the 750MC RGB class.

Alan March

Cost Estimator - Ford Motor Company

Cost Judge

Alan has been working for Ford Motor Company for over 14 years and has worked in various roles during this time. Having completed a four year tool-making apprenticeship specialising in body die work, Alan worked in the toolroom on various body parts for Ford and other OEM body panels. After a further three year period, Alan then went to work in various Finance roles from accounting, vehicle line analysis for CD car and product development finance. Alan then moved into cost estimating working on manual and powershift transmissions and more recently working on manual gear shifters and manual gear shifter cables.

Frank Marsh

Technical Director - Insta

Cost Judge

Frank originally took a degree in mathematics before becoming a management consultant with P&O. He transferred to Oracle as an account director where through their sponsorship became involved with GPN touring cars. Frank is currently involved with TOCA/G50 as a team technical manager and runs cars in two additional series. He has also just co-founded a software development company. Frank has been involved in Formula Student since its first year at Bruntinhorpe as a Cost judge.

Sean Michael McGrath**Transmission Cost Estimating Supervisor - Ford Motor Company
Cost Judge**

Sean started his automotive career with Ford Motor Company and completed a four year mechanical/electrical apprenticeship. After finishing his apprenticeship, Sean gained one of the top ten positions in his year and was placed in the machine shop at Dunton technical centre. Sean spent two years developing a manufacturing background within that department and then gained a position in the Cost Estimating department within Ford, where he stayed for seven years. Afterwards, Sean was offered a position as a TVM Finance leader within the Finance department of Ford Motor Company and was then promoted to Powertrain/Transmissions Cost Estimating Supervisor. This will be Sean's sixth year as a cost judge at Formula Student.

Michael Odenwald**Finance Leader Team Value Management - Ford Motor Company
Cost Judge**

Michael has been a Cost Judge at Formula Student for the past eight years. He has a degree in Mechanical Engineering and has been with Ford for 17 years, working within Engine Engineering, Cost Estimating, Teardown & Benchmarking and Finance. Michael's present position is Finance Leader Team Value Management (TVM), this consists of cross-functional teams with experts from Engineering, Purchasing, Cost Estimating and Finance, looking for cost reduction opportunities on current models and supporting the forward model teams in developing affordable components.

David Paramo**Systems Engineer - Bombardier Transportation
Cost Judge**

Since graduating from Brunel University David has held positions both in education and industry, most recently as a systems engineer for Bombardier Services Division working on refurbishment, maintenance optimisation and overhaul extension projects in the UK and abroad. He has been a Cost Judge at Formula Student for the past two years.

Sarswati Patel**Powertrain Financial Analyst - Jaguar Land Rover
Cost Judge**

Sarswati has been working for Jaguar Land Rover for the past 10 years within the Finance team. She started her career in Manufacturing Consolidation and now works in Product Development for Programme Finance. Sarswati has been fortunate to have worked with the award winning Range Rover Evoque team as a Powertrain Analyst. She has been a Cost judge for Formula Students for the last eight years.

Alan Pope
Manufacturing Leadership Graduate - Rolls-Royce
Cost Judge

Alan was the Chief Engineer on the 2010 Formula Student entry at Warwick University. The car was the lightest and most successful car that Warwick have produced thus far. Alan's focus around the design for manufacturing and assembly meant that the resultant car was easy to maintain and allowed to considerable time to test the car.

Bharath Puttur
Student - Brunel University
Cost Judge

Bharath was one of the key members of Brunel University's Formula Student team and participated in Class 2 at Formula Student 2011. Initially Bharath dealt with steering design, but later on was involved in design and manufacture of suspension, chassis and powertrain subsystems.

Zeeshan Qadeer
Manufacturing Engineer - Jaguar Land Rover
Cost Judge

Zeeshan has been in the industry for nearly three years and is currently working for Jaguar Land Rover as a Manufacturing Engineer on product lines Range Rover Sport and Discovery. His previous employment includes two years with Rolls Royce Aero Engines as a Manufacturing Engineer on HP/IP turbine discs and engine tail bearing housing structures.

Steve Savage
Global Lead Estimator - Ford Motor Company
Cost Judge

Steve has worked in the automotive industry for over nine years and is experienced in high and low volume manufacturing techniques. He has a technical and commercial background which he has gained through such roles as senior buyer and lead cost estimator and has held positions at a tier one supplier and OEM. Current position as global lead estimator requires knowledge and understanding of costing methodology and latest BIC manufacturing processes.

Robin Stephenson
Commercial Risk Analyst - Ford Motor Company
Cost Judge

Robin completed his engineering degree at Bath University and followed this by 11 years working as a product development engineer in the defence, electronics and telecommunications sectors. He then made a career change into finance, initially supported by a postgraduate

Diploma in Management Science (DMS) and followed by the Chartered Institute of Management Accounting (CIMA) professional exams. For the past 14 years Robin has been working as an accountant in the product development, business management, internal audit, and commercial risk fields. He is particularly interested in promoting effective communication between engineers and accountants. Robin has a 1960's Lotus Elan drophead which he is slowly restoring. Robin was a Cost Judge from 2008 to 2010.

Robert Taylor
Senior Research Technologist - BP
Cost Judge

Rob was part of the Cardiff University Formula Student team competing in competitions at both Silverstone and Hockenheim. His main focus was on the design and manufacture of the chassis for the 2011 entry but also gained experience in suspension setups throughout testing and at the events. Since leaving university he has begun working for Babcock Marine working on a range of projects in the Marine and Defence sector. These projects have mainly focussed on Submarines, however his latest placement has seen a focus on the manufacture of the Tamar Class RNLI lifeboat.

Patrick Travers
Manufacturing Engineer - Jaguar Land Rover
Cost Judge

Patrick is currently on the Jaguar Land Rover graduate scheme as a Manufacturing Engineer and is working on engine and axle production for Jaguar Land Rover. He graduated from Trinity College Dublin with a Manufacturing Engineering with Management Science degree.

Hannah Wells
Advanced Manufacturing Engineer - Jaguar Land Rover
Cost Judge

Hannah graduated from Cambridge University in the Summer of 2011 with a degree in Manufacturing Engineering. In September 2011 she joined Jaguar Land Rover on their two year graduate scheme as an Advanced Manufacturing Engineer and is currently working on projects that involve changes to the current Jaguar XF model.

Mark Williams
Cost Estimating Supervisor - Ford Motor Company
Cost Judge

Mark has worked in the automotive industry for a total of 23 years, including 10 years as a cost estimator. He has previous experience as a CAD designer and Tool making and an extensive knowledge of manufacturing techniques and processes used to produce Automotive

components. Currently, Mark is responsible for vehicle teardown and analysis. Mark has supported Formula Student as a Cost judge since 2007.

Terry Wilson
Retired (Financial Controller) - Jaguar Land Rover
Cost Judge

Terry has eight years involvement as a Cost Judge with FS. He was a Financial Controller at Jaguar Land Rover and Ford Motor Company for most of his career, specialising in Product Development, Manufacturing and Purchasing. His assignments have taken him to Detroit, Germany and Gothenburg.

Jason Wright
Cost Estimator - Ford Motor Company
Cost Judge

Jason has worked for Ford Motor Company for the past nine years, starting as an Apprentice within the Design department and graduating to a Prototype Mechanic within the Performance and Economy department. Most of this experience was in engine development and calibration based at FMC research and development centre Dunton. Jason is now a cost analyst within the Cost Estimating team at FMC and uses his knowledge of manufacturing processes, methodology and mechanical expertise for product costing operations.

Design

Murat Ali

Research Engineer - University of Warwick

Design Judge

Murat is an engineer with a Masters degree in Mechanical Engineering. Along with a number of years industrial and academic experience in various sectors of engineering, he has completed projects on Formula Student vehicles and was a project leader of the Brunel Racing Team. Murat has found Formula Student very memorable and would like to continue supporting the event. Murat has a keen interest in cars since childhood and has a passion for the automobile, motorsport, general engineering and education.

Carl Bailey

Hardware Electronics - Engineer Mercedes AMG HPP

Design Judge

Carl is a Hardware Electronics Engineer at Mercedes-AMG High Performance Powertrain in the eKERS/ERS development team. His work involves design and development of the motor and system control electronics for these systems. Carl has been involved in the automotive industry for less than 12 months but has previously worked in a wide range of electronics disciplines including communications, data logging, digital signal processing and power electronics. Previously, he has competed in motorsport, driving and preparing his own cars for rallying and sprinting for over 25 years.

Ian Barnard

Senior Principal Consultant – Pcubed

Design Judge

Ian is a senior Principal Consultant at Pcubed Management consultancy. He is a Fellow of the IMechE and has been working in and around the automotive industry for 16 years. As a qualified mechanical engineer, Ian started his career in crash testing at Jaguar Cars, he then moved into vehicle testing and programme management. Ian then spent the next two years working for TWR where he managed the project controls department. After a further couple of years with Aston Martin working on the DB9 and V8 vehicle programmes Ian joined Pcubed where he is responsible for several clients across the midlands including automotive and agriculture.

Anthony Barnicott

Design Engineer - Arash Motor Company

Design Judge

After first being introduced to Formula Student in 2006 Anthony has

competed in class 1:200 as team leader (1st place finish) Class 3, Class 1 (UK and Germany with a 2nd place finish in Germany 2009) and also aided in his University's Class 1A teams. From his success with Formula Student, Anthony is now a Design Engineer with Arash Motor Company (a low volume sports car manufacturer) with his first success being the development of the Arash af10 (as seen on the Top Gear DVD 2011). Anthony has been involved as a volunteer/judge for the past two years.

Aleksandar Berberic

Performance Engineer - Mercedes AMG HPP

Design Judge

Aleksander is a Chartered mechanical engineer with 12 years' experience in core engine design, development and testing, spanning from 300cc lawnmower engines through to 78 litre 18 cylinder mining truck engines. Currently he works as an engine performance engineer on V8 Formula 1 engines at Mercedes AMG HPP. Aleksandar's main areas of expertise are fuels and lubricants, journal bearings, pistons, valvetrain and turbocharging as well as calibration for low emissions and optimum performance on both diesel and gasoline platforms.

Alan Brunning

Retired (European Tech Specialist) - Ford Motor Company

Design Judge

Alan has an MSc in quality engineering and has 20 years experience of designing, tuning, setting up and building his own Formula Ford cars. During his time at Ford he was the European technical specialist on suspension systems and paid particular attention to human vibration perception and cross system engineering.

Joe Burnell

Mechanical Engineer - Mercedes AMG HPP

Design Judge

Joe competed in Formula Student in 2005 and returned for the first time last year as a Design Judge. After completing a Masters degree in Mechanical Engineering he joined Triumph Motorcycles as a Chassis Design Engineer. His responsibilities included taking model updates from concept to production, including the design of castings, forgings, fabrications and plastic mouldings. Joe was also tasked with organising chassis and tyre testing. Since joining Mercedes AMG High Performance Powertrains he has spent 15 months working on the dynamic components of the V8 before switching to his current role where he is responsible for the layout of the 2014 ERS.

Owen Carless
Head of Stress - Red Bull Technology
Design Judge

Owen is now in his sixth year as an Formula Student Design Judge. He is currently Head of Stress at Red Bull Technology and is responsible for structural analysis of components in the middle and rear of the car. Owen's experience covers all aspects of structural design and analysis, using both finite-element and classical methods, and encompasses both metallic and composite materials. He was a competitor at Formula Student in 2006 with the University of Bath, where he was responsible for powertrain and electrical system design and installation.

Trevor Cave
Risk Manager - HP Enterprise Services
Design Judge

Trevor is an engineer, originally from the aircraft industry but is now working in IT. When Trevor was self-employed from 1986 to 2008 he became involved with various speed record projects, initially Bluebird Electric, and other hi-tech sport, including GB Bobsleigh. He has judged at Formula Student since 2000 and specialises in modelling of performance and electric drive train.

Stuart Chamberlin
Senior Analysis Engineer – Cosworth
Design Judge

Stuart is a Senior Analysis Engineer for Cosworth's F1 Trackside Group. In this role he is responsible for design and development of trackside software packages and analysis techniques relating to the CA2012 engine used by engineers in the field.

Steven Clark
Restoration Manager - Fiennes Restorations
Design Judge

Having carried out a year long industrial placement in the stress department of Williams F1 whilst at University, Steven Clark went on to lead the design of the University of Bath's 2011 Formula Student entry and then graduated the same year. Steven now works for Williams F1 as an engine systems design engineer focusing on hydraulic, water and oil systems.

Pat Clarke
Training Manager - Hyundai Motor Company Australia
Design Moderator

Pat is a retired bike and kart racer and is a past CIK VP with responsibility for Technical Matters. His first FSAE event was in 1994 and he came to Formula Student UK in 2000 to take part in the Design

judging. Pat is the Chief Design Judge and Technical Advisor to both FSAE Australasia and Formula Student Germany and is the Chief Design Judge at Formula Student Austria.

Jez Coates

Managing Director - CAD Ltd

Design Judge

Jez was the Technical Director at Caterham Cars for 23 years prior to setting up his own consultancy in niche vehicle engineering. Currently, Jez is engineering a new British low volume sports car, the Zolfe GTC4. For the past six years Jez has been part of the Design judging team, as a Lead Judge.

Alex Coignac-Smith

Mechanical Engineer - Mercedes-Benz HighPerformanceEngines

Design Judge

Alex graduated from the University of Birmingham in 2010 with a Masters in Mechanical Engineering. Whilst at University he was involved in Formula Student and competed in five competitions in the UK and Germany. Alex was heavily involved in all areas of the car and feels that FS had a large influence on successfully starting a career in the motorsport industry at Mercedes AMG HPP. Alex started on the Graduate scheme but now holds a full time Mechanical Engineering position working on engine and turbo design.

Nicholas Cooper

Engineer - MERCEDES AMG PETRONAS

Design Judge

Nick currently works for Mercedes AMG PETRONAS F1 team as a Tyre Analysis Engineer. He has been at the Brackley based team since its Honda days seeing the changes from Honda to Brawn to Mercedes. Before working in F1, he was a consultant at Ford in Powertrain Control Systems Engineering working as a Feature Engineer for powertrain driveability. He has also been involved in Formula Student while completing his PhD in vehicle dynamics control at the University of Leeds competing in the UK, USA and Japan and as a Design Judge at the UK and German events.

John Corrigan

Composite Design Engineer - Progressive Design & Engineering

Design Judge

John is a Design Engineer experienced in composite structures, tooling and assemblies. He was a previous competitor at Formula Student 2011, with a top three finish. John is currently working with Lola Cars on a wide range of motorsport projects and has previously been a race director at a small Irish motorsport facility.

Tony Crouch**Mechanical Design Engineer - Mercedes AMG HPP****Design Judge**

Tony has worked in the motorsport industry for 22 years, with the last 17 years working for Mercedes-Benz (Ilmor). During this time he has worked in the fields of powertrain testing, performance development, FE analysis and design. This will be his second year judging at Formula Student.

Robert Dewhurst**Retired (formerly Associate Fellow Whole Engine Structures - Rolls-Royce)****Design Judge**

Bob is a Fellow of the IMechE and sits on the Council of the Institution. Recently retired from Rolls-Royce Aerospace, he managed a number of technical departments and was a Rolls - Royce Associate Fellow in Whole Engine Structures, experienced in the structural behaviour, dynamic analysis and testing of gas turbines. Bob has been a Formula Student Design Judge for four years. He was an active participant in motorsport and built and raced a Formula Vee single seater. He is an active member of the Classic Car Club and Rolls-Royce Heritage Trust.

John Eldridge**Principal Engineer - Sellafield Ltd****Design Judge**

John Eldridge is a Chartered Engineer and Fellow of the IMechE, and a senior manager in the nuclear industry, with experience in the design, construction, commissioning and operation of plants in the UK and overseas. His interest in motorsport engineering started as a student and now includes roles as constructor, competitor and licensed technical official. He actively supports the Formula Student competition's mix of innovation, design, engineering and manufacturing with the associated exposure to time and costs constraints and sees participation as a positive indication to the potential employees of the graduate engineer's range of technical and personal skills.

David Evans**Engineer - Ricardo UK Ltd****Design Judge**

David worked as a Project Manager and then System Engineer at Ricardo UK Ltd in Shoreham-by-Sea after finishing his Mechanical and Automotive Engineering degree at the University of Birmingham in 2008. Whilst at University, he was a member of the Formula Student team UBRacing and Team leader in his final year, where his team had the most successful year in its history. He has supported Formula Student events ever since, including Design Judging for the past 3 competitions

as well as general dynamic event support.

Gilles Gardner

Lead Subsea Engineer - J P Kenny Caledonia (Wood Group)

Design Judge

Gilles participated in the FormulaSAE(East) from 1999-2004 and was involved in all aspects of the design, costing, presentation and project management, but focussed on suspension design during his last few years with the team. He has been involved with Formula Student since moving to the UK from Canada in 2004 as a Design Judge and most recently as a Technical Scrutineer. Gilles is currently employed in the offshore oil and gas industry as a lead subsea design engineer and specialises in flexible pipe flowlines and risers.

John Gentry

Race Engineer SuperNova GP2 Team - Road Racing Research Ltd

Design Judge

John started his career in motorsport in 1970 with March Engineering and has since worked in Formula One, Sports Cars, Touring Cars as well as Grand Prix Motorcycle Racing with factory Suzuki and Yamaha teams. Currently working as a race engineer with the SuperNova GP2 team and John was a design judge at Formula Student in 2011

Denis Gorman

Product Development Engineer - Ford Motor Company

Design Judge

Denis was a Formula Student Competitor from 2007 to 2009 at University of Bath, where his main responsibilities were air intake, powertrain, crash structure, vehicle testing and driving. Denis was also a Formula Student Design Judge in 2011. Currently, Denis is a Product Development Engineer at Ford Motor Co., with responsibility for powertrain on-going design, analysis and resolution of issues in warranty. Denis previously worked at Ricardo as a Mechanical Development Engineer and was primarily involved with powertrain design, durability testing and problem resolution. Additional projects included engine weight reduction, material selection and vehicle reliability/duty cycle analysis.

David Gould

Designer - Gould Engineering

Design Judge

David designed a number of successful hillclimb cars including the cars that have won the British Championship for the last 13 years.

Miguel Guedes**Electronics Intern - Mercedes AMG HPP****Design Judge**

Miguel was part of the ProjectoFST (TU LISBON) Formula Student team, for three years as Electronics Team Leader, where he developed the first electric Formula Student car from Portugal. Miguel has participated in the 2009 and 2010 events, achieving 1st place in Class 2 (2010). The team also competed in Formula Student Germany in 2011, where the judging team was impressed with the BMS developed, the same car then achieved second place in Formula Student Spain 2011. Miguel joined Mercedes AMG HPP last September as a placement student and has earned himself a position of the graduate scheme for the next two years.

John Gwynn**Automotive Engineer - First Group****Design Judge and Dynamic Volunteer**

John has been passionate about motor racing since the age of seven and is the founding member and faculty advisor of the French ISAT FS team. He has been responsible for reducing energy costs at First UK Bus, has been involved in the development of hybrid systems for buses and the LMP2 Mygale impact conformity. John has also assisted with the creation of the first toughened structural adhesive bonded in automotive structures during the 1980s with Dr Bill Lees of the ICI.

Thomas Hale**Principal Development Engineer - Changan UK****Design Judge**

Thom has 20 years experience of design, development, R&D and innovation in internal combustion engines. He is an avid follower of various forms of motorsport including F1 and MotoGP. He is a keen motorcyclist and "petrol head", with experience of modifying road cars and building kit-cars. He is particularly interested in low weight and low fuel-consumption vehicles, and achieving low fuel consumption through mission-specific design. He has been a Design Judge for FS in 2010 and 2011, and thoroughly enjoyed the experience – especially comparing the design solutions chosen by big-budget and lower-budget teams.

Hannah Hammond**Project Engineer - Claytex Services Ltd.****Design Judge**

Following the enjoyment of competing in FS with Loughborough University in 2005, Hannah has continued to participate in the competition as a design judge. She currently works in the area of vehicle modelling and simulation for Claytex Services Ltd, with a focus on developing models for vehicle dynamics analysis. Previously, as a systems engineer in the defence and aerospace sectors she worked on a

wide range of projects, from the reliability of the Airbus A380 landing gear to the technology management for an armoured fighting vehicle programme.

Dr Julian Happian-Smith
Automotive Engineering Consultant -
CHS Vehicle Safety Consulting
Design Judge

Julian is an automotive engineer with 35 years industrial experience in the Automotive industry covering research, development, design, and manufacture. These experiences have involved a wide range of vehicles from motorcycles, racing cars to mass production cars. Within this range of vehicles he has worked on the development of engines and their components, aerodynamics, chassis and body in white design, and vehicle safety. He has been involved in vehicle crashworthiness for the past 20 years including motion analysis of vehicles and dummies and has successfully led research bids for Government and EC funding.

Mike Hart
Development Engineer - Jaguar Land Rover
Design Judge and Scrutineer

After competing for the University of Birmingham in the final two years of his degree from 2007 to 2008, Mike joined Triumph Motorcycles as a Design Engineer. Two and a half years later, he switched companies to pursue a career in Stability Control development at Jaguar Land Rover. Mike now works at various global test locations tuning ABS, Traction and Stability Control on both Jaguars and Land Rovers.

James Hope
Electronics Team Leader - Mercedes AMG HPP
Design Judge

James has worked in Motor Sport for 19 years, working on engines and hybrid electronics systems.

William Horgan
Director - Stainless Classics
Design Judge

Will's main experience is design for manufacture, in a wide range of industries, fluid power, instruments, HGV, and electro-mechanical applications. He became Technical Director of Metering Pumps Ltd, then moved on to design consultancy, and has been teaching young engineers for the last 18 years. Will now runs his own company, engaging in the manufacture and supply of components for classic British motorcycles. His car experience began with what are now considered "Classics", but he is also very interested in sustainable technology.

Lyczezar Ilijew**Systems Integration Engineer - Mercedes AMG HPP****Design Judge**

Lyczezar is a Systems Integration Engineer (Electronics) at Mercedes AMG HPP. His involvement in Formula 1 is to acquire, test and select new technology sensors for the new V6 engine for 2014, as well as designing the electrical harnesses linking the SECU and the engine electrical components. His previous automotive positions include Principal Project Engineer (Advanced Electronics) at TRW where he worked on Electric Servo Steering and Delphi Diesel Systems where Lyczezar was an Electronics Engineer specialising in Light and Medium Duty ECU.

Dan Ince**Mechanical Design Engineer - Mercedes AMG HPP****Design Judge**

Dan graduated from the University of Hertfordshire in 2008 with a Masters degree in Automotive Engineering. During his time there he competed as part of the Class 1 Formula Student Team in 2007 and with a team of fellow Masters students, won the inaugural Class 1A competition in 2008 with a Hydrogen ICE powered car. Dan took a gap year in industry during his studies and worked as a crash engineer at Millbrook Proving Ground. After graduating he earned a position at Mercedes AMG HPP on their graduate programme, he has since progressed into a permanent role as a Mechanical Design Engineer.

Helen Jackson**Brakes Refinement Attribute Team Leader - Jaguar Land Rover****Design Judge**

Helen's motorsport journey began at Leeds University working her way up from gofer to team captain in their Formula Student team. After graduating she continued working with racing teams including V8 oval racing, GT's, Le Mans 24hr and more recently data engineering in the European F3 Open series. Helen's day job as a brake refinement attribute development team leader, sees her spending time in the UK and on the mountain roads in Spain working to deliver class leading brake refinement.

Derek Jordanou-Bailey**Team Leader Mechanical – Mercedes AMG HPP****Design Judge**

Puja Kapoor
Mechanical Engineer - Essar Oil UK
Design Judge

Puja graduated from the University of Manchester with a Masters in Aerospace Engineering where she was also part of the Formula Student Team for four years – leading the team in her final year. Since graduating in 2009, she has participated as a Business Presentation Judge and a Design Judge. She now works at Stanlow Oil Refinery, which is currently owned by Essar Oil UK (previously owned by Shell Oil UK) as a Graduate Mechanical Engineer.

Natalie Keeler
Reliability Engineer - Mercedes AMG HPP
Design Judge

This will be Natalie's first year as a judge, but previously she was a competitor with the University of Bath entry in 2000. She has always been very passionate about motorsport and was fortunate to be sponsored by Ilmor Engineering Ltd for her studies. Since graduation Natalie has held positions within the Test Operations, Trackside and Reliability Engineering departments at Mercedes AMG HPP - gaining knowledge and experience across various engine testing platforms, both at the factory and at the track. Natalie is currently a member of the Reliability Engineering Group and Lead Engineer for Testing Efficiency and Track to Dyno Synergy (representative Durability testing).

Jonathan Keep
Senior Engineer – Cosworth
Design Judge

Jonathan is currently a senior engineer at Cosworth, where he started as a graduate, designing F1 cylinder heads. In 2007 he left Cosworth to move Williams F1 working on the car's fuel system, but the draw of returning to engines proved too much to resist and in 2009 he returned to Cosworth. He has worked on a variety of projects since returning, from wind turbines to F1 Kers drives, and most recently has been working on the installation of a brand new engine into a hybrid supercar. He has been a Design judge for two previous Formula Student events.

Timo Keinänen
Calibration Engineer- Bosch Engineering
Design Judge

Timo is an automotive engineer from Helsinki, Finland. During his studies Timo gained three years of experience in Formula Student engine development with the Helsinki team. After graduation he began working in engine development and motorsports in US, Finland, Germany and currently in the UK. He currently holds a position in high performance gasoline engine calibration.

Pierre Kerrou
Reliability Engineer - Mercedes AMG HPP
Design Judge

Following an engineering apprenticeship Pierre spent a few years at Cosworth engaged in powertrain design with road engines. He then spent six years at Integral Powertrain, a design consultancy in Milton Keynes as a design engineer, again with automotive powertrains. Pierre also spent several of those years as part of Integral Powertrain's CAD consultancy, providing best-practice training at many new CATIA installations. Now, Pierre works at Mercedes AMG HPP, having been a mechanical engineer responsible for the powertrain installation in one of our F1 teams, and more recently as a reliability engineer working with the KERS system.

Dr Richard King
Design Judge and Dynamic volunteer
Technical Specialist - Bentley Motors

Richard took part in the first Formula Student back in 1998 as a Chassis Engineer. He then gained his PhD in vehicle dynamics before moving into various positions in various industries, including Formula One, Automotive, Aerospace and Defence. Since it began, he has had some sort of involvement in just about every Formula Student event as either a team member, lecturer, technical scrutineer or design judge. These days, Richard work for Bentley Motors as their multi-body dynamics specialist, developing vehicle performance models and methods to ensure the vehicle and its components will survive all the punishment of performance motoring.

Jason Linden Tahinci
Consulting - Freelance
Design Judge

Jason graduated from the University of Bath with a Masters Degree in automotive engineering where he was the dynamics manager for the very fast and successful 2011 Bath Formula Student car. He was responsible for determining all the suspension and steering geometries together with defining all the ride dynamics whilst analysing tyre data. Prior to that he was a professional racing driver where he raced at GP2 level with the likes of Lewis Hamilton, Timo Glock and Pastor Maldonado. He has a very good understanding of vehicle dynamics and performance, vehicle testing, data analysis and a good knowledge of general component design.

Philip Major
Retired (formally at CSC Computer Sciences Ltd)
Design Judge

Philip has been involved in Motorsport for over 35 years as a self builder

and competitor. A disciple of the late Allan Staniforth he has built and developed several race cars. Currently running a Vision Clubmans car with a 2ltr Red top engine running on Methanol.

Dr Keith Martin

Lecturer in Mechanical Engineering - Open University

Design Judge

Keith is a Chartered Engineer and Fellow of the IMechE. He holds an international racing license and is racing school trained. Previously, Keith has been a winner of school championships in Formula Ford and Saloons, has competed in Clubmans-sports and has experience in track and wind tunnel testing. Keith has been a Design Judge at Formula Student since 2004 and a team leader since 2007.

Ruaraidh McDonald-Walker

2014 Boosting Systems – Mercedes AMG HPP

Design Alternative Powertrain Expert

Ruaraidh has previously worked in F1 and Engine Consultancy and started out on the Cosworth Graduate scheme. He is now working at Mercedes AMG HPP on boosting systems for 2014, having previously worked on KERS. Having completed a joint honours degree in Electrical and Mechanical Engineering, Ruaraidh is in the lucky position of enjoying the mechanical, thermodynamic and electronic aspects of engine development and operation.

Dr Lyn McWilliam

Performance Development Engineer - Mercedes AMG HPP

Design Judge

Lyn currently work at Mercedes AMG HPP as a performance development engineer for the 2014 engine. Her responsibilities include the fuel development and combustion characterisation on the engine. Prior to that she worked in the Low Carbon Energy team at Caterpillar research, where she also completed the requirements to become a Chartered engineer. Lyn completed her PhD in 2008 in Combined Hydrogen/Diesel combustion.

Ben Michell

Principal Engineer (Race Engineering) - Dunlop Motorsport

Design Judge

Ben competed in Formula Student, Formula StudentAE-A and Formula StudentAE in Detroit as part of the University of Birmingham. He designed the suspension for two cars and acted as Technical Director in his final year. Ben joined Dunlop Motorsport in 2005 and has worked in MotoGP, LMS, ILMC, ALMS, VLN, and WEC. He developed the BMW tyres that won the ALMS championship in 2011 and has recently become responsible for trackside Race Engineering activities across all

disciplines.

James Montgomery

Design Integration Engineer - Rolls-Royce

Design Judge

James studied Mechanical Engineering at the University of Warwick, completing a third year project on ground effect aerodynamics and leading the Formula Student team in 2005. He therefore has a broad understanding of the challenges involved in funding, designing, building and operating a Formula Student car. James joined Rolls-Royce plc as a designer on the Marine Trent gas turbine project, and is now responsible for integrating design changes to the Trent 900 jet engine. This is his fifth year on the Formula Student judging team.

Andrew Nash

Simulation Engineer – Mercedes AMG HPP

Design Judge

Since graduating in 2005 Andrew has worked for Mercedes AMG HPP. His current position is a simulation engineer with responsibility for 1D fluid and thermodynamic simulations. Andrew has been involved in Formula Student for the past two years as a judge and volunteer, and he also competed whilst at university.

Robert Neilson

SME (Damping) - Jaguar Land Rover

Design Judge

Robert competed in Formula Student for three years at the University of Strathclyde working predominantly on the suspension design. After completing his degree in Mechanical Engineering he began work at Jaguar Land Rover, working on control systems for active suspension systems. He has recently changed departments to work on the development of adaptive damping technologies.

Ivo Nikolov

Mechanical Engineer - Mercedes AMG HPP

Design Judge

Ivo is a Mechanical Engineer at Mercedes AMG HPP, currently working on the 2014 powertrain programme, specifically on the mechanical design of the boosting system for the new-era engine. Previously, Ivo has worked on the auxiliary systems for the V8 engine currently on the F1 grid and also completed a six month secondment at the Mercedes AMG F1 team where he was a member of the suspension design team for the 2012 W03. Ivo was a Formula Student competitor with Imperial College during 2005 and 2006 where his involvement was exclusively in chassis and suspension, most notably the design of the uprights and braking system for the 2006 car.

Daniel Nuttall**Power Electronics Engineer - Mercedes AMG HPP****Design Judge**

Daniel is a Power Electronics Engineer for Mercedes AMG HPP, where he designs current and future F1 KERS race systems. He has extensive knowledge of power electronic systems and control approaches, system modelling and integration methods. Daniel began his career as a research assistant at the University of Manchester. Here he developed novel hybrid fuel cell automotive drive systems and traction power electronics. He also attained his PhD. during this time. Following a successful period at Manchester University, Daniel worked in the military aerospace industry for three years specialising in the research and design of novel switched-mode power supplies.

Chris Oldroyd**Reliability Engineer - Mercedes AMG HPP****Design Judge**

Following completion of his degree in Automotive Engineering at Loughborough University in 2009, Chris joined Mercedes AMG HPP as a graduate engineer. Since then he has had a varied training scheme in different areas of the business and last year took up a role as a Reliability Engineer with the company. The main focus of Chris' work is passing-off engines as fit for use for track and dyno events. Chris had his first involvement with Formula Student last year as a judge.

Matthew Packham**Mechanical Engineer - Mercedes AMG HPP****Design Judge and**

Matthew graduated in 2008 with a MEng Mechanical Engineering degree from the Sheffield Hallam University.

Gareth Pemberton**Principle Research and Development Engineer - Air Products****Design Judge**

As an undergraduate Gareth wrote his dissertation on improving volumetric efficiency on a Formula Student racing car. During the 2003/4 season he competed with Warwick University designing the intake system, part of the drive train and suspension system, assisting with electronics and looking after the build of car. Gareth has worked for Air Products on control systems, project management, quality control and as a Quality Manager and is now in R&D with an expertise in the development process which forms part of his studies for an Engineering Doctorate. He has a strong interest in motor sport and is restoring a classic mini.

Sebastian Price**Design Integration Engineer - Rolls-Royce****Design Judge**

Sebastian first became interested in motorsport attending VW shows and Drag Racing events. He graduated with a Masters in Mechanical engineering from Birmingham University and participated in Formula Student in his first, second and final years. Currently, Sebastian works as a Design Integration engineer at Rolls-Royce in a systems integration role for aero transmissions and drives.

Keith Ramsay**Team Leader – Mercedes AMG HPP****Design Judge**

Keith has had a varied career which has taken him from places such as CERN, through to electronics and instrumentation design to the then (12 years ago) backwater technologies of hybrid vehicles and EVs. In his current role, Keith is responsible for the design and development for the Mercedes AMG HPP F1 KERS components and systems.

Steve Randle**MD - Randle Engineering****Design Judge**

Steve is the owner of Randle Engineering Solutions, a specialist in vehicle dynamics and suspension systems engineering. He is also currently a Research Consultant to McLaren Automotive. Steve has been a Design judge in one previous competition.

Roger Ratley**European Gasoline Calibration Development Manager - Ford Motor Company****Design Judge**

Roger is a University of Southampton Mechanical Engineering graduate with 16 years of technical and managerial experience in the motor industry covering engine control systems, powertrain project management, vehicle programme and launch management. Most recently, through his current position as Diagnostics Manager for Ford of Europe, he has been involved with diagnostic system design, development and support. Roger is a MSA Scrutineer and has the technical responsibility for Formula Ford in which he has been involved for 14 years. He is a Chartered Engineer and member of IMechE and an Essex Centre Automobile Division committee member.

Prof. Dr Horst Rönnebeck**Professor - University of Applied Sciences Amberg-Weiden****Design Judge**

Dr Rönnebeck studied Mechanical Engineering at the University of

Hanover and then gained his PhD at the Institute of Design in Machine Elements and Safety Engineering on Reliability & Safety Engineering. Dr Rönnebeck has worked in the development department of gas turbines at ABB Power Generation in Switzerland and the development department of digital printing machine at NexPress in Germany and the USA. Since 1999 he has been a Professor of design at UAS Amberg-Weiden. From 2005 to 2009 he was the Dean of the Mechanical and Environmental Engineering Faculty at UAS Amberg-Weiden. He has participated in Formula Student events in the UK, Italy and Germany since 2005 and has been a Design Judge at Formula Student UK from 2007.

Claude Rouelle
President – OptimumG
Design Judge

Claude has over 30 years of race car engineering design, simulation and development experience in Formula Ford, F3, European and Japanese F 3000, Formula One, Australian V8 supercars, WTCC, GT, Indycar, LMP1 and LMP2. Since 1997 Claude has taught 339 in-house and public training courses to a total 8900 engineers on applied vehicle dynamics to race car design and development. He has also taught race car engineering at Masters level in three different universities. OptimumG has evolved from a small, one man operation to an established industry providing its clients with custom and developed software solutions and in-lab and on-track consulting services for tire and car development

Dean Scott
Composites Design Engineer - WilliamsF1
Design Judge

Dean's involvement with Formula Student began as Team Leader and Chief Designer for the Loughborough University team from 2002 to 2005. For the last 6 years he has been working as a composites design engineer at Williams F1.

Caterina Secchieri
Engineer – Centro Ricerche Fiat (CRF)
Design Judge

Caterina is an ex Italian Formula Student team member and leader. She was part of a team for three years and then, unable to leave Formula Student, decided to continue as a scrutineer and dynamic event volunteer for the past three years. After a Masters degree in aerospace engineering she is now undertaking a Masters in automotive engineering. In the past she worked as telemetrist and is now an engineer in the body architecture department at CRF (Fiat Research Centre).

David Smith
Chief Designer (Intakes) - Pall Aerospace
Design Judge

This is David's third year as a Formula Student judge and 35th year in the Aerospace Industry. In his day job he is a Chief Designer with the filtration manufacturer Pall Aerospace. David's motorsport experience goes back 40 years starting with Junior karts, going via circuit marshalling (including British GP), event organisation to designing and building a couple of reasonably successful F750 cars (driver was the restriction rather than the car) one of which is still competing today. He also mentors a current Formula Student team.

Robin Stafford Allen
Mechanical Engineer - Culham Centre for Fusion Energy
Design Judge

Robin has been involved with motorsport since his youth which was spent motor-cycling, karting, and rallying, this was followed by seven years as an engineer with Vauxhall working on engines, transmission and chassis. Robin spent 10 years engineering super-conducting MRI magnets and for the last twenty years working on development of special components of plasma-heating and cryogenics in pursuit of Nuclear Fusion. He has been a judge for Formula Student for the past three years.

Daren Steward
Technical Specialist - Jaguar Land Rover
Design Judge

Daren has worked within the Automotive industry for the past 22 years since graduating from Hatfield Polytechnic with a degree in Automotive Engineering. He has worked for that time within Chassis and on many vehicle programmes, such as MGF, Rover 75, Land Rover Freelander and many other well known Jaguar Land Rover products. This has led to a position as Jaguar Land Rover's Technical Specialist for Braking Attributes. This role involves the creation, application and delivery of Braking targets across the Jaguar Land Rover vehicle range, as well as researching technology to achieve those targets.

Tim Stokes
Design Engineer - McLaren Racing
Design Judge

Tim is a Design Engineer at McLaren Racing; currently working in the wind tunnel model design department. Over the last three years he has also worked in many other areas of car design giving him a wide range of experience. Tim was a member of the 2009 University of Bath Formula Student team who achieved an overall placing of fourth at the UK competition.

Lee Stretch**Performance Simulation Engineer - MERCEDES AMG PETRONAS
Design Judge**

Lee is a graduate of Hertfordshire University and was a member of the UK's top Formula Student team UHRacing from 2006 to 2011. Lee later became Technical Director, achieving third place at Formula Student UK and second place at Formula Student Germany in 2009. His interests in suspension design and simulation have led him into the field of vehicle dynamics, where he has reached his ambitions of joining Formula 1. Having completed an industrial placement at championship winners Brawn GP, he has returned to the newly branded Mercedes F1 Team as a performance simulation engineer, providing analysis on all aspects of car performance for childhood hero Michael Schumacher, and Nico Rosberg.

Alexandra Sye**Mechanical Engineer - Mercedes AMG HPP
Design Judge**

After graduating from the University of Cambridge with a Mechanical Engineering Degree, Alexandra joined Mercedes AMG HPP on their graduate scheme. She then progressed into a permanent position as a Mechanical Design Engineer. Whilst at university Alexandra participated in Formula Student for two years, competing both in the UK and German events. During her first year she worked within the team's Powertrain group, and in her second year became the overall team leader.

Mike Tanswell**Mechanical Engineer - Mercedes AMG HPP
Design Judge**

Mike began his involvement in motorsport during school, competing in 100cc karting nationally. At Imperial College he was a keen member of the Formula Student team. Mike graduated in 2006 and started his career at Ricardo, where he spent over two years designing and analysing transmissions from Tanks to Fiestas. Mike then moved to Crompton Technology Group for two years designing composite torque tubes for a US Military Aerospace project. For the last year Mike has been working for Mercedes AMG HPP as a Mechanical Engineer looking after the current F1 V8 engines for Mercedes, McLaren and Force India.

Oliver Taylor**Graduate Mechanical Engineer- Babcock International Group
Design Judge**

Oliver is a graduate of the University of Bath (2007) where he achieved a first class honours degree in Automotive engineering. He competed in Formula Student in 2007 and has judged in the Design competition since 2008. He currently works for BP in global fuels and lubricant research as

a Senior Research Technologist. Through his experience Oliver has launched lubricant formulations under the Castrol brand and has designed, developed and tested motorsport formulations for Formula One, Le Mans and Rally racing series.

Stewart Thornton
Engineering Specialist (Design) - Rolls-Royce
Design Judge

Stewart is an Engineering Specialist in Design of Transmissions and Structures with over 15 years experience at Rolls-Royce in the Aerospace division. He is primarily involved with Future Projects and has significant experience of gearbox design. Prior to working at Rolls-Royce, he was a research scientist at TRL, working on the implementation of the NCAP programme.

Karol Tomczyk
CAE Analyst - Simpack Engineering Ltd
Design Judge

Karol is a CAE Engineer with two years experience in product design and analysis which involved various businesses, including automotive, aerospace and logistics. He holds an MSc in Automotive Engineering and a MEng in Mechanical Engineering.

Grant Tuff
Strategy Analyst - Energy Technologies Institute
Design Judge

Grant worked for over 20 years in motor racing, starting as a design engineer at Reynard Racing Cars working on all aspects of design including aerodynamics, chassis, transmission and suspension. This was followed by time spent as race and test engineer with the Williams Formula 1 team involved in vehicle set-up, data analysis and race strategy development. After this, Grant worked in the vehicle dynamics department and has worked in all areas including simulation, rig testing and data analysis and reduction. He now works on low carbon vehicle technologies at the Energy Technologies Institute.

Kevin Ukoko-Rongione
Vehicle Integration Engineer – Williams Advanced Engineering
Design Judge

Kevin's passion for motorsports began at age 9 when he started racing Karts. During his time at school he competed in 'Formula Greenpower' and other national events organised by 'Young Engineers'; and in 2006 embarked upon a degree in Mechanical Engineering at the University of Bath. In 2008 he secured a placement year at Williams F1 working within the design office. During his Masters year he chaired the Bath University Motorsports Club, and joined the 2011 Bath Formula Student

Team as Build Manager. He has now returned to Williams working as a Vehicle Integration Engineer on the new Jaguar CX75 hybrid supercar.

Nick Vaughan

Retired

Design Moderator

Nick is a qualified Mechanical Engineer and has conducted most of his research work into design and control of powertrain systems. Initially these systems were based on continuously variable transmissions but more recently they have included hybrid electric and fuel cell vehicles. Nick has initiated a Formula Student activity at his former university in 2000 and has been active ever since both as a presentation judge and then as a design judge, most recently becoming a member of the moderating team. As an engineer Nick is interested in understanding most aspects of car design but in reality is most interested in the driving experience and driving technique.

Alistair Wardrope

Senior Engineer - Atkins

Design Judge

Alistair has been involved in Formula Student since 2002, first as a competitor, then as team advisor to the first Class 1A winning team, and now as a Design Judge for this class. He has six years industrial experience, mostly developing hydrogen fuelling systems for the Fuel Cell vehicle industry. He currently works as the Lead Mechanical Engineer for a £200M Nuclear safety project set up in response to the events in Fukushima, but continues to advise both the MOD and DECC on matters regarding hydrogen vehicles on behalf of his employer, the engineering consultancy, Atkins.

Oliver Webb

Design Analyst - Xtrac Transmission Technology

Design Judge

Oliver attended Formula Student as a spectator at the NEC in the late 1990's and was lucky enough to be one of the founding members of Loughborough University Motorsport. He manufactured and organised the manufacture and preparation of various aspects of the cars until 2006 when he graduated with a Masters Degree in Mechanical Engineering. Oliver has worked in a variety of industries from Engineering Consultancy at Magna Parva, to Design and Development of RC cars at Team Associated in California, to Design, Analysis and Acoustics at Dyson. Oliver is currently a Design Analyst at Xtrac Transmission Technology.

Thomas Weber
Development Engineer - Ferrum AG
Design Judge

Thomas studied mechanical engineering at ETH Zurich with an emphasis on lightweight structures and product development, where he joined AMZ to design and build a vehicle for Formula Student 2008. The first two years, they successfully participated in Class 1. During the 2010 season, Thomas designed the drivetrain of an electric car, which won class 1A overall. Just after the design of another electric car, he graduated and started work as development engineer at Ferrum AG. Thomas has taken part in 15 FSAE competitions as a competitor.

Matt Webster
Service Engineer – Dunlop Motorsport
Design Judge

Matt graduated from the University of Manchester's Formula Student team in 2008 having spent three years being heavily involved with the project, including a stint as Team Leader and time spent focussing on chassis and suspension design. After three years managing subsea projects in the North Sea oil and gas industry, Matt is now working for Dunlop Motorsport as a trackside Service Engineer supporting the World Endurance Championship.

Matthew Wilkin
Senior Tyre Engineer - MERCEDES AMG PETRONAS
Design Judge

Matthew was the Team member and Captain at University of Leeds Formula Student team from 1999 to 2004. He has worked in F1 vehicle dynamics for eight years with Red Bull, Honda, BrawnGP and now Mercedes.

Simon Williams
Calibration Engineer - MAHLE Powertrain
Design Judge

Simon has worked for MAHLE powertrain for the past five years in the engine calibration department after graduating from Loughborough University in 2006. In 2011 he was a Design Judge.

Dr Tim Williams
Director - Simpact Engineering Ltd
Design Judge

Tim has a strong academic and professional background in vehicle design and development, in particular virtual and experimental methods. His core skills & experience lie in automotive safety and development. He has had heavy involvement in the design and development of vehicle structures to meet a range of targets (strength and stiffness, NVH and

crash). He now works for Simpact, who own and develop OMS hillclimb and sprint cars which are similar to Formula Student vehicles but without design restrictions. This will be Tim's fifth year as design judge at Formula Student.

Geoff Willis

Technical Director - MERCEDES AMG PETRONAS

Design Judge

Geoff has been involved in F1 for two decades and has had a variety of roles from aerodynamic designer through to Technical Director. With experience at Williams, BAR, Honda, Red Bull and HRT F1, he is currently Technology Director at MERCEDES AMG PETRONAS Formula One Team. This role involves looking at the car performance development across all disciplines, specifically overseeing all aspects of the aerodynamics, vehicle engineering, as well as all activity on the dyno and simulators. He has been a judge at Formula Student for a number of years and is looking forward to being a Lead Design Judge once again.

David Wiltshire

Senior Lecturer - University of Portsmouth

Design Judge

David's industrial career spans 35 years covering electrical, nuclear, shipbuilding and water supply sectors; from the design of fuel pumps at Plessey to hot cells for the UKAEA with Gravatome Industries Limited. He was responsible for project management of the Royal Navy Type 23 Frigate Main Electrical Power System at Vosper Thornycroft Controls Limited. David joined the composite materials research group at the University of Portsmouth in 2002, where he is currently Senior Lecturer at the School of Engineering. He is a trustee of HoverAid, a specialist operator of hovercraft for flood relief and access to remote areas in developing countries.

Gary Woods

Design Engineer - Flybrid Systems LLP

Design Judge

Gary competed at Formula Student in 2006 with the University of Bath. After graduation he worked as a Design Engineer at Zytek Engineering for four years. His main projects were road and race electric hybrid systems but Gary also worked on the V8 race engine and Le Mans Sports-car. Currently, Gary is working at Flybrid Systems in the design and application of a mechanical Flywheel Hybrid system for use in an OEM demonstrator vehicle. He has been involved in Formula Student as a Design Judge/Design Team Lead for the last five years.

Charles Wright
Owner - C Wright Engineering Services
Design Judge

Charles was previously a Design and Technology and Engineering teacher and is currently self employed in the agricultural engineering and education sectors. He has designed and built several vehicles with local schools to compete in Greenpower and Eco-Marathon races.

Thomas Yates
Design Judge
Programme Management - Mercedes AMG HPP

Thomas was the Project Manager of Relentless Team Bath Racing for the 2010-2011 season, his responsibilities included design and manufacture of the cooling system, oil system and fuel system, as well as business presentations. He graduated in 2011 from University of Bath with Masters in Mechanical Engineering. Thomas has completed various industrial placements with both Mercedes and Ricardo, currently he is Programme Coordinator at Mercedes AMG High Performance Powertrain.

Scrutineers

Arman Abolvardi
Student - Sunderland University
Scrutineer and Dynamic volunteer

Arman is currently a drug discovery MSc student at Sunderland University. He has always been interested in motor vehicles/racing and after four years of being part of Sunderland University's Formula Student team he has decided to return to Silverstone as a volunteer.

Dr Howard Ash
Senior Lecturer - University of Hertfordshire
Scrutineer

Howard started out as a competitor with the original UK FS team, from the University of Leeds, from 1996-2002. He then became faculty advisor at Oxford Brookes from 2004 - 2006, before moving to the University of Hertfordshire where he also took on the role of faculty advisor. Howard also sits on the FS steering committee.

Richard Bailey
Graduate Engineer - Babcock International Group
Scrutineer

Whilst studying Aeronautical Engineering at Loughborough University, Richard undertook a 1 year placement at Tata Motors European Technical Centre where he was involved in the design and production of prototype electric vehicles. Richard is now employed by Babcock International Group – Nuclear Division and is based at Heysham 1 Power Station.

Chris Baker
Safety Scrutineer

John Barlow
Safety Scrutineer

Enric Canal Garcia
Student - Cranfield University
Electrical Scrutineer

Enric currently studying for an MSc in Automotive Engineering at Cranfield University as part of a double degree programme with UPC Barcelona and will be joining Jaguar Land Rover at the end of the summer. During the last two seasons he has been a member of UPC Barcelona Team (ETSEIB Motorsport) and was involved in the design of the two combustion cars as well as the new electric car. Having participated in a total of five European competitions he has gained

experience in all the events from two perspectives, from the outside as a team member and from the inside as a driver.

Dr Alastair Clarke
Lecturer - Cardiff University
Scrutineer and Event Captain

Dr. Alastair Clarke is a Lecturer in Tribology and Applied Mechanics at Cardiff University. Prior to that he spent 2 years at Swansea Metropolitan lecturing in Automotive and Motorsport Engineering, where he was involved in Formula Student and Formula 4 race teams. He has a PhD and undergraduate degree in Mechanical Engineering from Cardiff, where he was heavily involved in the Formula Student team.

Andrew Crome
Design Engineer - Goodrich Actuation Systems
Scrutineer and Dynamic volunteer

Currently a Concept Design Engineer at Goodrich Actuation Systems, working on the next generation of Secondary Flight Control Systems for future aircraft. Andrew has volunteered at Formula Student for the past two years and has a keen interest in Motorsport.

Geoff Deacon
Safety Scrutineer

Henry Fairhead
Safety Scrutineer

Robert Foxon
Graduate Engineer - Babcock International Group
Scrutineer and Dynamic volunteer

Robert studied Mechatronic Engineering at Lancaster University, gaining his MEng in 2010. Since leaving University he worked as a Graduate Engineer for Babcock International Group Nuclear division, in the role of a project engineer on the Fuel Route Improvement Team at Heysham 1 Power Station. Robert participated in Formula Student as a competitor in 2010 and as a Scrutineer in 2011.

George Hopkins
Development Engineer – Delphi
Scrutineer and Event Captain

George competed at Formula Student until 2004 after which he has been an active member of the volunteering team working as a scrutineer and part of the dynamic events team. He has also supported the Learn to Win event for the past two years, offering advice to students and took part in the discussion sessions. Since graduating George has worked for Delphi Diesel Systems on diesel injector manufacture and fuel system

development. As a hobby George prepares vehicles and competes in hillclimbs and sprint events around the UK.

Gwyn Jenkins

Retired Service Director - Alpha Mechanical Handling Ltd. (now defunct)

Scrutineer

Gwyn first became involved with Formula Student after meeting Michael Royce in the USA during a World Land Speed Record attempt and has attended the past seven Formula Student events as a Scrutineer. Gwyn retired three and a half years ago after spending most of his working time on electric traction in the mechanical handling industry

Mike Jenkins

Information and Process Manager - Ministry of Defence

Scrutineer

Mike has been a Technical scrutineer at Formula Student since 2006, specialising in alternative powertrain vehicles since 2009. He competes in Hillclimbs and Sprints in one of Allan Staniforth's Terrapin cars.

Dhruva Korana Leelakantha

Student - Cranfield University

Scrutineer and Dynamic volunteer

Currently, Dhruva is pursuing a MSc in Automotive Engineering at Cranfield University and has a BEng in Mechanical Engineering from Visvesvaraya Technological University, India. Dhruva helped to create the FSAE team Stratos G at Bangalore Institute of Technology.

Francesco Laviola

Resident Engineer - Robert Bosch SpA

Electric Scrutineer

Francesco is an electronic engineer and has attended past Formula Student events as a student. After graduating he joined Robert Bosch SpA as a resident engineer.

Stuart Lewis

Hybrid Project Engineer - Jaguar Land Rover

Electric Scrutineer

Stuart is currently working for Jaguar Land Rover as a Hybrid project engineer. He was a team member with the University of Hertfordshire in 2011 but due to work commitments never got to attend. Stuart has eight years' experience with the automotive sector, between road and race cars.

David Lowe
Sporting Director - 646 Sports Management
Scrutineer

David currently runs his own Management company, engineering cars in the Porsche Carrera Cup GB and is Team Manager for a two car Ferrari GT team in British GT and Blancpain championship. Before this, David was FIA Team Manager F1 World Championship as well as Technical coordinator GP2 and Technical Delegate GP3. Many years of hard work have seen David through every engineering aspect as well as organising the World's F1 Grand Prix.

James Luetchford
Design Engineer - Formtech
Scrutineer

James is a Design Engineer at Formtech

Michal Macuda
Student - Cranfield University
Scrutineer

Michal gained his undergraduate degree in Mechanical Engineering at the Silesian University of Technology in Poland, and now is studying Automotive Product Engineering at Cranfield University. He was a member of the Silesian Greenpower team in 2011, where they achieved second place. Michal previously worked for Tenneco Automotive (Poland) before attending Cranfield University.

Philip May
Chassis Engineer - Jaguar Land Rover
Scrutineer

Phil has taken part in Formula Student for the last three years. He was a member of Aston University Formula Student team during 2009 and 2010, and took part as a Technical Scrutineer at last year's event. Currently, Phil is completing the Graduate Scheme at Jaguar Land Rover and has previously worked in the aerospace industry for Doncasters Aerospace.

Tim McCann
Owner - Magma Images
Scrutineer and Event Captain

Tim has taken part in Formula Student for the past three years as a scrutineer, event captain and dynamics volunteer. Tim is the owner of Magma Images, a photographic company based in Manchester. He has previously competed in the 600cc supersport class as a motorcycle racer on both Honda and Yamaha bikes.

Carlos Morales
Student – Cranfield University
Scrutineer and Dynamic volunteer

Carlos is studying for an automotive MSc at Cranfield University. His previous University did not participate in Formula Student, but he has participated in other events, as a volunteer, such as the Volvo Ocean Race and Champions League Final in Madrid.

Gary Priestner
System Architect Engineer - Jaguar Land Rover
Scrutineer

Gary Priestner was a member of the 2011 University of Liverpool Formula Student team focussing on bodywork and the pedal box. He now works as a system architecture engineer for Jaguar Land Rover in the Midlands.

Michael Royce
Retired - Albion Associates LLC
Scrutineer

Michael is now retired after working for almost 41 years within the Chrysler family, but still works as a consultant for Albion Associates LLC. Between 1992 and 1994 Michael was the Technical Director at Lamborghini Engineering in Italy, managing the Chrysler-Lamborghini Formula 1 engine program. He has been actively involved in Formula SAE since 1986. From 1996 to 2009, he was a member of the Formula SAE Rules Committee, and Chairman from 2000. Michael has officiated at all the Formula Student competitions, and approximately 50 other Formula SAE, Formula Hybrid, Formula SAE-Australasia and Formula SAE-Italy competitions.

Suzanne Royce
Albion Associates LLC
Scrutineer

Suzanne is a licensed road racing and Pro Rally scrutineer since 1972, and is ACCUS-FIA licensed since 1986. She has been Chief Scrutineer for all Formula One races in the USA since 1986 (Detroit, Dallas, Phoenix and Indianapolis, and now in Austin). She is also Chief Scrutineer for the MotoGP at Indianapolis. She has been active as a Collegiate Design official since 1986, and has officiated at approximately 60 Formula SAE, Formula Student, and Formula Hybrid competitions in the USA, UK, Australia, and Italy. Suzanne is the principal of Albion Associates, LLC, which involves digital imaging and technical services to the motorsport industry.

Nathan Sharp
Graduate Engineer - Ricardo UK Ltd
Scrutineer and Dynamic volunteer

Nathan first became involved in Formula Student as a member of the University of Surrey team during the 2009/2010 season. Having successfully designed the team's first dry sump application, exhibiting a CFRP sump pan, he went forward to become head of suspension and powertrain as well as team director during 2010/2011. Having graduated from the Surrey MEng with a distinction, Nathan now works at the engine and transmissions consultancy Ricardo, currently in the area of transmission design and hydraulic actuation.

Dr Blake Siegler
Principal Engineer - Jaguar Land Rover
Scrutineer

Dr Siegler currently works at Jaguar Land Rover in the Vehicle Dynamics department developing vehicle suspension settings and new technologies. He was the founder member of the Birmingham University team, competing in the USA in 1998 and was a member of the Leeds team competing in 1999, 2000 and 2001.

Dallas Smith
Safety Scrutineer

Joe Staton
Engineering Manager - Sheffield Refractories Limited
Scrutineer

Joe was a Formula Student competitor from 2005-2009 (with a cameo in Germany during 2011) for Cardiff University, leading the team in 2006 and 2009. He is now currently studying for a robotics PhD in Cardiff whilst working full time at a refractories company in Sheffield.

Ulf Steinfurth
Mechanical Engineer - UAS Stralsund
Scrutineer

Ulf has been a mechanical engineer since 1993 and has been involved with Formula Student since 2000 where he was the Faculty Advisor for the UAS Stralsund Formula Student team. In 2006 he was appointed Chief Scrutineer for FS Germany.

Daniel Thompson
Graduate Design Engineer - Nissan (NTC) Europe
Scrutineer

Dan Thompson is a Chassis Design Engineer working for Nissan at their European R&D headquarters in Cranfield. He competed in Formula Student for four years with Sunderland University, leading the team as

captain in the final year. Dan specialised in suspension and brake systems and designed the SU2012 car's chassis componentry and geometry from the ground up.

Malcolm Thomson
Gasoline Performance Development Engineer -
AVL Powertrain UK Ltd
Electrical Scrutineer

Malcolm has been involved with Formula Student for the past four years, first competing and then volunteering as a Scrutineer in 2011. Malcolm is employed by AVL Powertrain UK, but is resident at Ford Motor Company as a Gasoline Performance Development Engineer, working on the latest generation of Direct Injection Turbocharged gasoline engines. He attended Heriot Watt and Cranfield Universities and spent a year on placement at Millbrook Proving Grounds Ltd, Beds. Whilst at Heriot-Watt he co-founded and managed the HW racing team, who brought their rookie design and running car to competition at Silverstone in just 10 months.

Alex Gi Cheuk Tung
Student - Cranfield University
Scrutineer

Alex previously competed in Formula Student 2011 with Heriot-Watt University Racing Team as Head of Powertrain. Currently, he is completing his MSc Automotive Product Engineering Course in Cranfield University and his thesis project is 'Limiting Factors for CO2 Reduction by Downsizing: Gasoline Engines'.

Chris Veale
Graduate Mechanical Engineer - Babcock International Group
Scrutineer

Chris graduated with a first class honours degree in Automotive Engineering Design and an MSc in Engineering Design. He completed an industrial placement for an automotive supplier and worked for a motorsport supplier as a Production Engineer. Currently, Chris is working in the nuclear industry on the UK's response to the Fukushima disaster.

Jake Wallis
Researcher - University of Birmingham
Scrutineer and Dynamic volunteer

Jake is a graduate of the University of Birmingham Formula Student team, having competed from 2007 to 2010 in everything from general dogs body to driver and team Technical Director, culminating in an unenviable rear hub failure during Autocross in 2010! After a short lived break from engineering he is currently undertaking PhD study, specialising in advanced engine development and after treatment.

Jay Williams**Product Development Graduate Engineer - Jaguar Land Rover
Scrutineer**

Following three years at Loughborough University, where he competed in Formula Student and completed a year in industry, he joined Tata Steel. There he was a manufacturing engineer and led numerous projects. In 2011 Jay left Tata Steel to join Jaguar Land Rover as a product development engineer in powertrain.

Event Captains and Dynamic Event Volunteers

Murtaza Ahmed

Maximum Demand Specialist - E.On

Dynamic volunteer

Murtaza graduated from Loughborough University with a BEng Hons in Automotive Engineering. Since graduating he has been working at E.On, in the SME contact centre as a Maximum Demand Specialist. He is interested in Motorsport and believes that Formula Student is the right way forward to get involved into racing. He interned at Honda in the manufacturing facility, which gave him an insight into how industry operates.

Kieren Back

Design Engineer – Nissan (NTC) Europe

Dynamic volunteer

Kieren is now a Design Engineer at Nissan Technical Centre Europe after graduating from University of Sussex. In 2010 and 2011 Kieren competed in Formula Student and achieved the highest overall position ever gained by the University in 2011.

Vikki Benn

Print and DM Account Manager -

Communis (Marketing Services)

Dynamic Event Results Co-ordinator

Vikki has been responsible for the Dynamic event scoring for the last eight years and also ensures the smooth passage of teams through scrutineering.

Jade Boggia

Product Development Engineer - Jaguar Land Rover

Dynamic volunteer

Jade is experienced in creative engineering roles and is currently working in Body Engineering at Jaguar Land Rover. This is her first year at Formula Student and hopes to bring a fresh set of eyes to the event.

Oliver Brazier

Product Development Engineer - Jaguar Land Rover

Dynamic volunteer

Oliver graduated from Loughborough University in 2011 with an MEng in Mechanical Engineering. During his degree he completed a placement year at General Motors UK, working in Supplier Quality. In September after graduating he started at Jaguar Land Rover where he has been

working for six months.

Thomas Cullinane

**Product Development Graduate Engineer - Jaguar Land Rover
Dynamic volunteer**

Thomas studied at the University of Warwick, and was part of the 2009 Formula Student Team during his fourth year. He is now working at Jaguar Land Rover as a Graduate Engineer and is part of Team Driven - a similar project to Formula Student.

Thomas Edwardes

**Development Engineer - Jaguar Land Rover
Dynamic volunteer**

Tom is currently on the first year of the Jaguar Land Rover graduate scheme within product development. He recently graduated from Coventry University with a BEng in Motorsport Engineering having spent a year with F1 team Brawn GP in the aerodynamics department. Tom took part in the 2011 Formula Student competition finishing 20th overall with a 1st in fuel economy for the Coventry University Phoenix team.

Shaun Flynn

**Wind Turbine Service Engineer - Siemens
Dynamic volunteer**

Shaun graduated last year with a BEng in Mechanical Engineering. He now works for Siemens, as a Wind Turbine Service Engineer. He competed in Formula Student in 2010 and 2011, with the University of Liverpool.

Jansy Green

**Product Development Engineer - Ford Motor Company
Dynamic volunteer**

Jansy has been with the Ford Motor Company for one year, specialising in Jacks, wheels and TPMS. Previously she has worked at Tata Motors and Jaguar Land Rover.

Ian Haigh

**Development Engineer - Lotus Engineering
Dynamic volunteer**

Ian competed for UBR (University of Birmingham Racing) from 2004-2007 as engineer specialising in vehicle dynamics, and as a driver at Silverstone and Hockenheim. Since graduating he has worked for Lotus Engineering as a Development Engineer.

Ian Hulme**Principal Chassis Engineer - Jaguar Land Rover****Dynamic volunteer**

Ian is a Chassis Engineer at Jaguar Land Rover responsible for the introduction of Bilstein Damptronic on various JLR vehicles and BWI MagneRide on Range Rover Evoque. He has been at Jaguar Land Rover for 15 years after leaving Leeds University where he was responsible for designing the monocoque for the 1997 Leeds Formula SAE car.

Tom Jackson**Brakes Engineer - Jaguar Land Rover****Dynamic volunteer**

Having graduated from the University of Leeds in 2010, Tom now works at Jaguar Land Rover within the brakes development team. His fourth year dissertation was based around the Leeds Formula Student car which competed in the USA in 2010.

Harinarayanan Jayaraman**Performance and Fuel Economy Engineer - Ford Motor Company****Dynamic volunteer**

Harinarayanan holds a BTech in Mechanical Engineering from SASTRA University, India and MSc in Automotive Product Engineering from Cranfield University UK. He is currently working as Performance and Fuel economy engineer at Ford Motor Company, Dunton Technical Centre. His role involves simulations and testing of vehicle performance and fuel economy. He has two years of experience as a volunteer in Formula Student, as a cost judge in 2010 and as a dynamic event captain in brake test in 2011.

Cary Kravets**Design Engineer - Lotus F1 Team****Dynamic volunteer**

Cary competed in six events across FSAE and Formula Student between 2005 and 2009, and is now working in the mechanical design group at Lotus F1 team.

Vibhu Mathur**Technical Analyst - Jaguar Land Rover****Dynamic volunteer**

Vibhu is a Technical Analyst for Jaguar Land Rover, specialising in wheels, tyres and chassis engineering, as part of the Product Development team. Before joining Jaguar Land Rover he completed a MSc in Automotive Product Engineering at Cranfield University. In 2008 and 2009 Vibhu participated in SAE Mini Baja, and then took part in Formula Student in 2011 as a Technical Scrutineer.

Asad Jan Muhammad
Student - GIK Institute of Engineering Sciences & Technology
Dynamic volunteer

Asad Jan is a Pakistani Graduate in Engineering Sciences from GIK Institute of Engineering Sciences and Technology, where he specialises in Opto-Electronics. He has participated in Shell Eco Marathon Malaysia 2011, Formula Student Japan 2011 and was a Red Shirt Volunteer at Formula Student Germany in 2011.

Pablo Olmedo
Graduate Design Engineer - Lotus F1 Team
Dynamic volunteer

Pablo was a member of the CSUN FSAE Team in 2006 and rose to team captain in 2007. He was then the Oxford Brookes suspension lead in 2009. Pablo has undertaken an internship at Toyota Technical California and has worked as a design engineer at Swift Engineering. Currently, he is a graduate composite design engineer at Lotus F1 Team.

Jacquelyn Quirk
Academic Liaison - Altair Engineering
Dynamic volunteer

Jacquelyn is currently the academic liaison for Altair Engineering, maker of Hyperworks FEA software. When she started at Altair, as part of a team she worked on a virtual full-scale model build of the Airbus A350 outer wing box. She holds a degree in Civil Engineering from Rensselaer Polytechnic Institute in upstate New York and moved to the UK in 2010.

Aniruddha Reddy
Student - Cranfield University
Dynamic volunteer

Aniruddha currently studying motorsport engineering at Cranfield University, where he is specialising in off-road vehicle dynamics. Previously he has been part of a group design project which involved Energy Recovery Systems, and was part of the skid pad test simulation and analysis team.

Nicky Richards
Pipeline Engineer - BP
Dynamic volunteer

Nicky Richards competed in Formula Student in 2011 with the University of Sussex as the suspension manager and a driver for the acceleration event. She graduated with a Masters of Engineering from Sussex in 2011 and now works for BP as a Subsea Pipeline Engineer.

Vipul Saxena
Exhaust Engineer - Ford Motor Company
Dynamic volunteer

Vipul has a Bachelors Degree in Mechanical Engineering and a Masters in Automotive Product Engineering. He now works for Ford Motor Company as part of the Exhaust Engineering in Powertrain Integration team and was previously placed in the Powertrain development Laboratory.

Mike Sexton
Mechanical Analysis Engineer - BAE Systems
Event Captain

Mike is a Mechanical Analysis and Testing Engineer with BAE Systems and has been with the company for nearly two years working on projects including flight control sticks and helmet mounted displays. Prior to this he worked for a sub-contractor for major automotive OEM's undertaking powertrain diagnostic work on diesel engines, and vehicle testing. Mike was an ardent competitor in Formula Student with Swansea University from 2003 to 2009, achieving a 1st place finish in the endurance event on his final outing with the team; he has since continued his competition involvement as a volunteer each year.

Chris Slevin
Application Engineer - Denso
Dynamic volunteer

Chris competed in Formula Student from 2005 to 2008 with the University of Hertfordshire, taking part in Classes 1-200, 3 and 1. He is currently working as an applications engineer at Denso UK.

General Volunteers

Tom Cilvert

Tom Cilvert is an A-level student studying Physics, Maths, Chemistry and Geography. He is interested in studying engineering at university and has chosen to volunteer for this event to gain a better understanding of degree level engineering and the opportunities that arise from it.

James Connolly

James is a student at Farnborough Sixth Form and looking to go to University next year. This is his second year volunteering at Formula Student.

Andrew Cooper

Andrew is a Year 11 student at Westcliff High School for Boys. He is interested in pursuing an engineering degree after A levels and would see this event as a brilliant way to experience the design and building skills of older students. He has been part of a team that designed and built a robot in a robot wars style competition.

Jonah Harris

Jonah has just completed his A-levels and is looking forward to studying engineering at university. Having studied mathematics, further mathematics, physics and German he takes a keen interest in Formula Student and one day hopes to become a competitor. Last year he participated as a general volunteer and this year will fulfil a similar role.

Dominic Hurrell

Dom is currently studying for his A Levels at Farnborough Sixth Form College where his subjects are Music Technology, Media, Film and Business. He has a part-time job at Waitrose and volunteers with the Duke of Edinburgh scheme.

Robert Spall

Robert has been visiting Formula Student annually for over five years and has been a volunteer at the last two. He currently studying for his A-Levels in Physics, Maths and Further Maths, as well as Geography and History.

Douglas Stormonth Darling

Douglas is a university student currently studying Ancient History and Latin. After university he plans to return to Botswana to work on a Safari Lodge as a manager.