What we do (at a glance)

- Graham Chetwood: Cost reduction from improved purchasing.
- Terence Cooper: Bioplastics, sustainable packaging, recycling & recovery.
- Peter Cox: Extrusion & multi-layered plastics.
- Peter Cracknell: High-quality on site polymer training & consultancy services.
- Gerhard Crossman: Turnaround & process improvements, change management.
- John Duncan: Thermal, dynamic mechanical & dielectric analysis.
- Keith Freegard: Recycling and environmental
- John Gearing: Thermal testing.
- John Gibbins: Recycling from materials to equipment.
- Sarah Greenwood: Packaging.
- Trevor Hutley: Global polymer industry consultant, research & innovation advisor.
- Michail Kalloudis: Testing, research/development & failure analysis.
- Robin Kent: Energy surveys & energy management, sustainability management.
- Pravin S Mistry: Global: mergers & acquisitions, recruitment, chairman, SHEQ systems.
- Fabrizio Rizzato/Petra Mickova: Thermoset polyurethanes from chemistry to equipment.
- Eddie Sheridan: Market research, materials, packaging & improvement.
- Bernard Sinclair: Product design.
- Robert Tomlinson: Providing solutions to processing problems.
Why use the PCN?

The PCN is a professional network of the best independent plastics consultants in the world.

Every PCN member is an independent, highly qualified and experienced plastics consultant.

PCN members are not only located around the world but also work around the world.

Membership is controlled and is restricted to professional consultants. All PCN members have a proven track record in plastics consultancy and years of experience in industry. They can bring this experience to your company at a fraction of the cost of hiring in-house resources.

All PCN members are committed to helping their clients find effective solutions, actively, quickly, creatively and at minimum cost.

Selecting a PCN member consultant guarantees a professional response to a professional need.

The PCN - for all you need to know about plastics, from the experts.

www.pcn.org
<table>
<thead>
<tr>
<th>Materials and Design</th>
<th>Additives</th>
<th>●</th>
<th>●</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Materials selection</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Polyurethanes</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Product design</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Thermoplastics</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Testing and analysis</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Processing</td>
<td>Blow moulding</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Compounding</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Equipment</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Extrusion</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Lean/Health &amp; safety</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Injection moulding</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Thermoforming</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Tooling</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Bioplastics</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Eco-product design</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Energy management</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plastics degradation</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recycling and recovery</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Sustainability management</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Waste management</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Export and import</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Legislative and regulatory</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Market research</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Mergers and acquisitions</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Automotive</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Electrical/Electronic</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>General</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Medical</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Packaging</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Authoring</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Project management</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Recruitment</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Training</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Trouble shooting</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
Graham Chetwood

SSC Consult, 88 Route de St Nom, 78620 L’Etang La Ville, France
Tel: +33 (0) 139 16 44 73
Mobile: +33 (0) 625 00 23 77
E-mail: gchetwood@ssc-consult.eu
Web: www.ssc-consult.eu

Specialities: Business improvement, Export and import, Market research, Packaging, Project management.

Dr. Terence A. Cooper

ARGO Group International, 15 Stage Road, Newark, DE 19711-4001, USA
Tel: +1 302 366 8764
Mobile: +1 302 420 9467
ARGO Group International, 11 Offley Road, Sandbach, CW11 1GY, UK
Tel: +44 (0) 2032 860 930
E-mail: tacoooper@argopolytech.com
Web: www.pcn.org/Cooper.htm


ARGO Group is a global polymer consultancy providing specialized services in chemical and polymer science, materials technology and market and applications development in North America, Europe, Japan and other international markets. We provide services globally in the following areas:
- New product, process, market and applications development in bioplastics (biobased, renewable, biodegradable and compostable) and water-soluble plastics.
- Polymer and plastics formulation, compound and process development.
- Development of biofuels, biobased and renewable chemicals, monomers and plastics.
- Packaging technology, package design and use, environmental issues and sustainability.
- Recycling and recovery technology and end-of-cycle processes (waste-to-energy, fuels, monomers and downstream chemicals).
- Strategic market analysis and research, development and technology portfolio evaluation.
Dr. Peter Cox

Peter Cox Associates, 19A Oxford Street, Lambourn, Berks, RG17 8XS, UK
Tel:  +44 (0) 1488 720 27
Mobile:  +44 (0) 7713 608 302
E-mail:  drpeter.cox@pca-materials.com
Web:  www.pca-materials.com

Specialities; Extrusion (Mono and Multilayer, Pipe and Tube), Expert witness, Training, Packaging Products, Blow moulding (Multilayer).

Peter Cox Associates is a leading consultancy for multilayer extrusion structures and polymer related properties. We provide the following services:

- Advice on structures required for multilayer products.
- Extrusion -Mono and Multilayer pipe (especially multilayer structures as used in cold/hot water applications) and tube.
- The design of extrusion dieheads to produce multilayer products for extrusion and blow moulding applications including recycling applications.
- In house teaching on single screw extrusion and product lines.
- Technical consultancy on extrusion and polymer issues.
- Rheology and melt properties of polymers.
- Training for extrusion technology applications.
- Training for the properties of multilayer and laminated structures and how to manufacture them including extrusion by sheet, cast and blown film or tube and blow moulding and laminating.
- Expert witness reports on polymer products and production means.

Peter Cracknell

PSC Associates, 9 Saffron Close, Shoreham-by-Sea, West Sussex, BN43 6JF, UK
Tel:  +44 (0) 1273 885 914
E-mail:  peter.cracknell3@ntlworld.com
Web:  www.pcn.org/Cracknell.htm

Specialities; Materials, Tooling, Expert Witness, Troubleshooting, Training.

PSC Associates is a leading online training company, delivering polymer engineering degree modules in Plastic Materials and Plastic Part Design for a number of universities and companies worldwide.

Our services include:

- Assessment of training requirement, design and delivery of bespoke onsite short courses within the UK and overseas.
- Consultancy and Troubleshooting on Injection Moulding, Vacuum Forming, Processing/Tooling and Plastics Materials Selection.

Many years of experience working in the polymer Automotive, Medical, Aerospace and Packaging sectors.
Gerhard Crossman

Forester Business Consulting Ltd., 1 Church Lane, Sproughton, Suffolk IP8 3BA, UK
Tel: +44 (0) 1473 463 440
Mobile: +44 (0) 7889 034 975
E-mail: gcrossman@fbc-ltd.com
Web: www.fbc-ltd.com

Specialities; Extrusion and injection moulding (PVC, PE, PP, GRP), Building products, Packaging products, general business advice for profitability improvements and turnarounds, Project management and LEAN support.

"Helping your business succeed" - not just under challenging economical conditions.

For more than 20 years we provide professional strategic business advice on successful business transformation and sustainable operational performance improvements for the European industry.

Main areas of activity range from hard and soft plastics processing to food and pharma packaging. Our focus is on maintaining operational excellence through sustainable operational and financial improvements and long-term partnerships with our international client base.

For more information and a full project list please visit either our website www.fbc-ltd.com or my personal profiles on LinkedIn or Xing.

We look forward to your enquiry.

Dr. John Duncan

Lacerta Technology Ltd., 80 Hathern Road, Shepshed, Leicestershire, LE12 9GX, UK
Tel: +44 (0) 1509 828 890
E-mail: john.duncan@lacerta-technology.com
Web: www.lacerta-analytical.com

Specialities; Analysis, Materials, Testing, Training, Instrument servicing.

Lacerta Technology offers Contract Research for assistance and advice on materials’ development and characterisation of mechanical and thermal properties over a wide temperature range and in controlled environments, for example air, nitrogen, fluid immersion and varying relative humidity. Dynamic mechanical and dielectric analysis are particularly sensitive to changes in polymeric structure in the solid state, for example with blends, the effect of cooling rate and the degree of cure for thermoset resins. Detailed analysis can assist in the optimisation of processing conditions.

Contract thermal analysis work, using the following techniques: DSC, DMA & DETA and the novel identiPol QA, specifically designed for Quality Assurance in the plastics’ industry.

Our reputation is well known in the field of Thermal Analysis.

- Test method development.
- Practical use temperatures.
- Studies of blended materials.
- Degree of cure studies.
- Composite materials measurement.
- Deformation mechanisms in plastics.
Keith Freegard

KFC Limited, Bremilham Road, Malmesbury, Wilts., SN16 0DQ2, UK
Tel: +44 (0) 1666 824 881
Mobile: +44 (0) 7867 526 768
E-mail: keith@freegard.net
Web: www.freegard.net

Specialities; Materials selection, Product design, Equipment, Mixing and compounding, Melt filtration, Testing, Environmental and recycling, Expert witness and legal, Legislative and regulatory, Marketing and market research, Strategic planning and forecasting, Automotive, Electrical and electrochemical, Packaging, Benchmarking, Project management.

John Gearing

Gearing Scientific Ltd., The Old Rectory, Seven Sisters Road, St Lawrence, Isle of Wight, PO38 1UZ, UK.
Tel: +44 (0) 1983 852 211
E-mail: gearingsci@yahoo.com (email is always better for a quick response)
Web: www.gearingscientific.net

Specialities; Analysis / Testing: Particularly thermal conductivity and specific heat for any polymer or composite. DMA/DMTA for Tg's. TMA for measuring thermal expansion of plastics and composite and other materials.
Gearing Scientific Ltd is a contract test house for thermal testing:
• Thermal conductivity testing.
• Thermal expansion on a TMA of solids.
• DMA/DMTA testing for Tg of composites and polymers and relative stiffness.
• GPC polymer standards from North America for European customers only.

Gearing Scientific Ltd have over 35 years experience of DMA / DMTA testing of polymers and composites for the glass transitions (Tg’s) and relative stiffness at certain vibration frequencies. From <<-100°C up to as high as is needed.
Over 30 years experience of thermal conductivity testing from 0 to 180°C (or less for some materials!) using one of 6 different apparatus here in our lab. From vacuum panels to any plastic or rubber or composite material. Also Cp of composite panels. Solids and liquids and gels etc.
TMA testing for the co-efficient of thermal expansion (CTE) of solids from -150 to 1000°C. GPC calibration standards, and research co-polymers from North America at reduced prices.
John Gibbins


Tel: +44 (0) 1278 423 544
Mobile: +44 (0) 7860 688 544
E-mail: johngibbins22@yahoo.com
Web: www.pcn.org/Gibbins.htm

Specialities:
- We are global, plastics reprocessing production consultants.
- We specialise in mergers and acquisitions.
- We buy, sell and source plastic materials for extruders, moulders and other processes.
- We offer single machinery, tooling and complete process lines for recycling plastics.
- We offer all ancillary equipment including: handling, extraction, washing, sorting, cleaning, metal removal, loading, storage, dosing, blending, bagging, weighing, testing, etc.
- We offer complete recycling solutions to the recycling industry from design to full production.
- We can obtain all licences.
- We offer full training at all levels.
- We offer toll processing.
- We offer warehousing and distribution and can source suitable factory units.
- We offer a complete range of recycled, off-spec, virgin and additives.
- We consult on waste reduction, alternative materials.

Sarah Greenwood

Sarah Greenwood Packaging, BBIC, Innovation Way, Barnsley, S75 1JL, UK.

Tel: +44 (0) 1226 249 590
Mobile: +44 (0) 7826 791 045
E-mail: sarah@scgreenwood.co.uk
Web: www.scgreenwood.co.uk


Sarah Greenwood, BSc(Hons), MSc(Eng), MIMMM, APkgPrf.
A Polymer Technologist, Sarah has worked and contributed to the development of car disc brake pads for T&N and high performance packaging films for BP. She has held demanding technical positions in all aspects of the packaging supply chain with Mars, Sun Branding Solutions, Asda and Fox’s Biscuits. Sarah now works with companies from start-ups to blue-chips on all aspects of innovation, specification and problem solving.
She holds an MSc(Eng) in Polymers and Polymer Composites, is an Accredited Packaging Professional and is a Member of IOM3.
Dr. Trevor J. Hutley

Arrabon Technologies Limited, Esuley, The Street, Hapton, NR15 1AD, UK
Tel: +44 (0) 1508 488 265
Mobile: +44 (0) 7895 012 902
E-mail: TrevorHutley@consultant.com
Web: www.pcn.org/Hutley.htm

Specialities: Global polymer industry specialist; Formulation, Materials, Additives, Compounding, Product development, Technology transfer, Technology commercialisation, Market research, Problem solving, Strategic thinking, Training.

Dr Trevor Hutley is a recognised polymer expert, an invited conference speaker and moderator, with a passion for teaching, who has broad experience in the global polymer and petrochemical industry, across many companies and organisations, in many pioneering and complex situations.

An unusual combination of broad and deep technology and science knowledge, combined with finance, marketing, manufacturing and business experience. An advisor on research & innovation.
linkedin.com/in/trevorhutley

Dr. Michail Kalloudis

Impact Solutions Ltd., 16 Abbotsinch Road, Grangemouth, FK3 9UX, UK
Tel: +44 (0) 1324 489 182
E-mail: Michail.Kalloudis@impact-solutions.co.uk
Web: www.impact-solutions.co.uk

Specialities: Testing, Characterisation and Development of Polymers, Plastics and Composites; Failure analysis and expert witness, Polymer Lab building and Polymer Training.


• Material Scientist, with a PhD on polymer physics and more than 8 years of experience in the development and characterisation of materials.
• Project Manager in long and short-term material development projects and initiated collaborations with top research institutes and international companies
• Member of the IUPAC sub-committee of the Structure and Properties of Commercial Polymers
• Strong background in advanced materials such as composites, biomaterials, polymer etc.
A leading global manufacturing consultancy:

- Merger & Acquisitions, Buying and Selling Companies.
- Preparing Companies for sale.
- Companies in Distress.
- Chairman Guidance.
- Restructuring, Growth Strategy.
- Polymer Technical Consultancy, Plastics, Rubber, Composites, Adhesives, Polyurethanes.
- Recruitment.
- SHEQ - Health & Safety, Quality, Environmental Systems, Implementation, Management Auditing.

We have been established for over 25 years and operate in UK, Europe, Nordic, Scandinavia, Switzerland, North America, Canada, South America, Middle East, Africa, India, China, Australia and New Zealand.

Please contact us in confidence. We are available 7 days a week.
We are an International Recruitment Specialist company for the Chemical and Polymer (Plastics Rubber, Composites, Polyurethane, Adhesives & Textile) industry. Our headquarters are based in the UK and through our worldwide offices we have a continual pipeline of candidates looking for jobs and employers looking to fill vacancies. A few examples of our assignments are as follows:

- **Executive Search:** Chairman, CEO, Managing Director, Financial Director, Sales Director, Operations Directors, Quality Directors, Technical Directors.
- **Managers:** Sales, Operation / Production, Quality, Technical, HSE.
- **Technical:** Colourist, Technologist, Sales, Quality Production, Technical Service, Technical Sales, Marketing, Engineering.
- **Assistance with CV writing.**
- We also offer an outplacement service to candidates through the employers.

We have been established for over 25 years and operate in UK/ Europe, Nordics, Scandinavia, Switzerland, North America, Canada, South America. Middle East, Africa, India, China, Australia and New Zealand.

Please contact us in confidence. We are available 7 days a week.
Fabrizio Rizzato/Petra Mickova

Fabrizio Rizzato: Alea s.n.c. di Rizzato Fabrizio & Mickova Petra, Via Prà Secco 137/A36010 Carrè (VI) - Italy
Tel: +39 334 990 12 30  
E-mail: frizzato@aleapur.com or pmickova@aleapur.com  
Web: www.aleapur.com
Skype™: frizzato.aleapur

Specialities: POLYURETHANES: Additives & property modification, analysis, materials selection, product design, product engineering, tool design and sourcing, material development, fine tuning of thermoset polyurethanes. Equipment, foam moulding, health and safety and training, quality assurance, thermoset pouring and injection. Finishing and decorating, testing, Marketing and market research. Automotive, biomedical, general products, furniture, shoe industry. Literature and patent search, project management, training, trouble shooting.
ALEA is dedicated to POLYURETHANES and guarantees to its customers consultancy and support during all the stages of the production processes:
• Start-up and fine tuning of productions related to polyurethane articles.
• Development and fine tuning of PUR systems.
• Commercial distribution (equipment, chemicals, tools).

Eddie Sheridan

Edwin G Fisher Associates, 41 Walton Road, Bushey, Herts. WD23 2JD, UK
Tel: +44 (0) 1923 237 160  
E-mail: info@egfa.co.uk  
Web: www.egfa.co.uk

Specialities: Materials, Business improvement, Environmental, Market research, Technology transfer, Packaging, Foam, Surveillance of new products, processes and technology, Mergers and Acquisitions.

Edwin G Fisher Associates is a long established consultancy to the plastics and rubber industry. The consultancy’s strength is in the area of business strategy. The organisation offers assistance in techno-economic studies, marketing, market research, diversification, new product and technology searches, feasibility studies, acquisition studies and licensing. Particular experience is available in plastics, polymers, elastomers, paints, chemicals and packaging.
The consultancy assists clients with the development of their business activities by offering services tailored to meet specific requirements and budget considerations whilst gaining maximum effectiveness by close co-operation. Services provided include:
• Market research and forecasting.
• Business strategy.
• New product surveillance.
• Future trend analysis.
• Plastic packaging.
• Feasibility studies.

Since it was founded the organisation has worked with corporations world-wide.
Bernard Sinclair

Product Engineering Associates, 11 Kerrison Road, Ealing, London, W5 5NW, UK
Tel: +44 (0) 20 8566 3456
E-mail: enquiries@prodeng.co.uk
Web: www.prodeng.co.uk


Bernard Sinclair has undertaken a number of expert witness and legal assignments. These mainly relate to disputes in connection with product design, intellectual properly or mechanical design (Haberman and V & A Marketing vs Jackel International: Non-spill toddler cup Anywayup Cup, Blue Gentian vs Tristar Products: Expandable Garden Hose - X Hose).

Clients for projects of this kind include: Freshfields, Dibb Lupton Alsop (DLA), Millbank, Tweed, Hadley and McCloy, Bates, Wells and Braithwaite, BNFL and Birmingham Alliance/Hammerson UK Properties, DWF LLP, Bristows and Freshfields.

Robert Tomlinson

Plastic Moulding Solutions

Plastic Moulding Solutions, 19 Leander Close, Sutton-in-Ashfield, Nottinghamshire, NG17 5BF, UK
Tel: +44 (0) 1623 452 639
Mobile: +44 (0) 7769 555 685
E-mail: Robert@plasticmouldingsolutions.co.uk
Web: www.plasticmouldingsolutions.co.uk

Specialities: Injection moulding, All blow moulding processes, Mould tooling, Decoration of plastics, Problem solving, Trouble shooting, Cost reduction, Interim management, Project management, Merger & Acquisition, Technical due diligence, Technical reports and appraisals. All market sectors served including packaging and medical.

Plastic Moulding Solutions is a consultancy aimed at solving all of the common moulding issues that a company can have and provides the following services:

- Problem solving.
- Technical appraisals and audits.
- New product development.
- Injection moulding.
- All types of blow moulding.
<table>
<thead>
<tr>
<th>Materials &amp; Design</th>
<th>Processing</th>
<th>Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additives</td>
<td>Blow moulding</td>
<td>Bioplastics</td>
</tr>
<tr>
<td>Analysis</td>
<td>Compounding</td>
<td>Eco-product design</td>
</tr>
<tr>
<td>Materials selection</td>
<td>Equipment</td>
<td>Energy management</td>
</tr>
<tr>
<td>Polyurethanes</td>
<td>Extrusion</td>
<td>Plastics degradation</td>
</tr>
<tr>
<td>Product design and evaluation</td>
<td>Health and safety</td>
<td>Recycling and recovery</td>
</tr>
<tr>
<td>Rubber</td>
<td>Injection moulding</td>
<td>Sustainability management</td>
</tr>
<tr>
<td>Thermoplastics</td>
<td>Quality</td>
<td>Waste management</td>
</tr>
<tr>
<td>Testing</td>
<td>Thermoforming</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tooling</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial</th>
<th>Markets</th>
<th>Other Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert witness</td>
<td>Automotive</td>
<td>Authoring</td>
</tr>
<tr>
<td>Export &amp; import</td>
<td>Electrical/electronic</td>
<td>Project management</td>
</tr>
<tr>
<td>Legislative and regulatory</td>
<td>General</td>
<td>Training (incl. online)</td>
</tr>
<tr>
<td>Market research</td>
<td>Medical</td>
<td>Trouble shooting</td>
</tr>
<tr>
<td>Mergers and acquisitions</td>
<td>Packaging</td>
<td>Recruitment</td>
</tr>
</tbody>
</table>
The most experienced experts in the plastics industry could be part of your team tomorrow!

More and more successful companies are shedding peripheral activities to enable them to concentrate on their core expertise, and when they need up to date specialised knowledge, they call in the acknowledged experts. World-leading companies do this for lawyers, catering and transport and when the expertise required involves plastics they call in the best available - from the Plastics Consultancy Network.

Consultants can form a vital part of any management team. They can be a valuable resource to be used as required. Unlike full-time staff, they are not a permanent and significant overhead cost. They are a variable and controllable cost to be used only as and when required.

There are few businesses today that are not exposed to global influences. The Plastics Consultancy Network has members throughout the world and individual members can tap into knowledge to provide both global and local solutions to major or local issues.

The PCN is not a general management consultancy; it is a specialist group of independent plastics experts. The complete focus on plastics means members can share the knowledge and information generated from many years of experience in all areas of the polymer industry. Our commitment is to helping clients find effective solutions, actively, quickly, creatively and at minimal cost.

PCN members can work as individuals or in project teams, the PCN exists to enable your project, however large or small to be accurately directed at the most appropriate consultant.

To find out more about how the PCN can help you or to apply for membership, visit the PCN website at www.pcn.org.

The essential support team is available to you today.
What we do (at a glance)

- Graham Chetwood: Cost reduction from improved purchasing.
- Terence Cooper: Bioplastics, sustainable packaging, recycling & recovery.
- Peter Cox: Extrusion & multi-layered plastics.
- Peter Cracknell: High-quality on site polymer training & consultancy services.
- Gerhard Crossman: Turnaround & process improvements, change management.
- John Duncan: Thermal, dynamic mechanical & dielectric analysis.
- Keith Freegard: Recycling and environmental
- John Gearing: Thermal testing.
- John Gibbins: Recycling from materials to equipment.
- Sarah Greenwood: Packaging.
- Trevor Hutley: Global polymer industry consultant, research & innovation advisor.
- Michail Kalloudis: Testing, research/development & failure analysis.
- Robin Kent: Energy surveys & energy management, sustainability management.
- Pravin S Mistry: Global: mergers & acquisitions, recruitment, chairman, SHEQ systems.
- Fabrizio Rizzato/Petra Mickova: Thermoset polyurethanes from chemistry to equipment.
- Eddie Sheridan: Market research, materials, packaging & improvement.
- Bernard Sinclair: Product design.
- Robert Tomlinson: Providing solutions to processing problems.