Conference Presentations

Theoretical Chemical Physics

International Conference on Computational Science, Melbourne, 1–4 June.

M.A. Collins presented the lecture: *Molecular potential energy surfaces by interpolation*.

Conference on Molecular Energy Transfer, El Escorial, Spain, 22–27 June.

M.A. Collins presented the lecture: *Accurate potential energy surfaces for polyatomics*.

XIth International Congress of Quantum Chemistry, Bonn, 20–26 July.

M.A. Collins presented the lecture: *Automated construction of ab initio potential energy surfaces for chemical reactions.*

Singapore International Chemistry Conference 3, Singapore, 15–17 December.

M.A. Collins presented the lecture: *Ab initio molecular potential energy surfaces*.

Synthetic Organometallic and Coordination Chemistry

4th Reactive Organometallics Symposium, University of New South Wales, Sydney, 22 May.

The following lectures were presented:

- M. Smith, *Crown ether and Schiff base complexes of f-block elements*.
- E.R. Humphrey, New methimazole ligands.
- R. Dewhurst, *Propargylidenes: building blocks for molecular wires.*

5th **Reactive Organometallics Symposium**, Australian National University, Canberra, 21 November

The following lectures were presented:

- L. Caldwell, Organometallic selenium complexes.
- N. Tshabang, Scorpionate complexes of molybdenum carbonyls.
- M. Schultz, Reactions of diphenylacetylene and diphenyl butadiyne with ruthenium(0) complexes.

Royal Australian Chemical Institute Conference on Inorganic Chemistry (IC03), Melbourne, 2–6 February

A.F. Hill presented the invited lecture: *Metallaboratranes: metal*→*boron dative bonding*.

The following posters were presented:

R.D. Dewhurst, A.J. Edwards and A.F. Hill, *Transition metal propargylidynes*.

A.J. Edwards, A.F. Hill, M.R.St.-J. Foreman, N. Tshabang, A.J.P. White, D.J. Williams, and A.C. Willis, *Scorpionates: poly(methimazolyl)borate chemistry of divalent ruthenium*.

A.J. Edwards, A.F. Hill, and <u>E.R. Humphrey</u>, *Rhodium-based coordination chemistry of poly(methimazolyl) ligands*.

A.F. Hill, A.D. Rae, <u>M. Schultz</u>, and A.C. Willis, *Alkyne coupling reactions mediated by ruthenium(0): formation of functionalised macrocycles*.

Inorganic Stereochemistry and Asymmetric Synthesis

INTAS Workshop 2003, University of Leipzig, Germany, 18–20 August.

S.B. Wild presented the invited lecture: *Chiral phosphines and arsines: Resolutions and asymmetric syntheses.*

Southern Highlands Conference on Heterocyclic Chemistry, Moss Vale, NSW, 7–9 September.

E. Krenske presented the invited lecture: *Alkyne exchange on phosphenium ions*.

Solid State Inorganic Chemistry

Joint Conference of the Asian Crystallographic Association and the Society of Crystallographers in Australia and New Zealand (AsCA'03/Crystal-23), Broome, Australia, 10–13 August.

The following posters were presented:

A.D. Rae, The use of parent symmetry to identify space group options for twinned/disordered pseudosymmetric crystal stuctures.

A.C. Willis, <u>A.D. Rae</u>, T.N. Cayzer, and M.S. Sherburn, *Polytype possibilities arising from pseudosymmetric crystal structures allowing stacking faults*.

9th European Conference on Solid State Chemistry, Stuttgart, Germany, 3–6 September.

R.L. Withers presented the poster: *Local strain, structured diffuse scattering and oxygen/fluorine ordering in transition metal oxyfluorides*.

The triennial meeting of the IUCr Commission on Aperiodic Crystals (Aperiodic 2003), Belo Horizonte, Brazil, 8–13 September.

- R.L. Withers presented the invited lecture: *Constraints, 'order' and new modulated phases*.
- R.L. Withers also presented the poster: *Local strain, structured diffuse scattering and oxygen/fluorine ordering in transition metal oxyfluorides*.

Solid State Molecular Science

Australian and Colloid Interface Symposium 2003. Coogee Beach, NSW, Australia, 16-19 February.

J.W. White presented the invited lecture: *Biologically directed Assembly of Soft Matter*

The following posters were presented:

- <u>E.P. Gilbert</u>, P.A. Reynolds, and J.W. White, *High internal phase emulsions and related microemulsions studied by SANS*.
- <u>R. Heidari</u> and J.W.White, *b casein conformation at the air-milk interface an X-ray and neutron study.*
- M.J. Henderson, T. Dowling, D. King, and J.W White, *Time resolved X-ray and neutron reflectivity: the growth of composite films at the air-water interface.*

27th **Annual Condensed Matter Meeting,** Wagga Wagga, NSW, Australia, February 4-7 February.

The following poster was presented:

M.J. Henderson, T. Dowling, D. King, and J.W. White, *Time resolved X-ray and neutron reflectivity: the growth of composite films at the air-water interface.*

EURESCO Conference Solid/Fluid Interfaces, Barcelona, Spain, 29 March – 4 April.

J.W. White presented the invited lecture: Template-induced biomineralisation.

AINSE Reflectometry and Small Angle Scattering Symposium, Lucas Heights, Australia, 25 – 27 June.

The following posters were presented:

- R. Heidari and J.W. White, Small-angle reflectometry of milk protein (b-casein) at the air/serum interface and its conformational changes due to fat content and temperature.
- <u>P.A. Reynolds</u>, M.J. Henderson, J. Zank, and J. W. White, *Solid/complex fluid interfaces studied by SANS*
- <u>A. Perriman</u>, M.J. Henderson, and J.W. White, *Chemical denaturation of globular proteins at the air-water interface: an X-ray and neutron reflectrometry study.*

ICRR 2003 - Radiation Meeting Brisbane, Brisbane, Australia, 17-22 August.

J.W. White presented the plenary lecture, *The worldwide use of neutron and synchrotron radiation*.

P.A Reynolds presented the lecture, *Breaking emulsions at a silicon surface studied by neutron reflectometry*.

The following poster was presented:

M.J. Henderson, A. Perriman, H. Robson-Marsden, and J.W. White, *The interaction of protein and polysilicic acid: an X-ray and neutron reflection study.*

<u>A.Perriman</u>, M.J. Henderson, and J.W. White, *Chemical denaturation of globular proteins at the air-water interface: an X-ray and neutron reflectrometry study.*

Orica Emerging Science Symposium 2003, Melbourne, Australia 5 November

P.A. Reynolds presented the invited lecture: The future of UnIChe

K. Baranyai presented the invited lecture: *Explosive Emulsions*.

Protein Synthesis and Evolution

28th Lorne Conference on Protein Structure and Function, Lorne, Victoria, 9–13 February.

The following posters were presented:

Y. Hyun, M. Hulett, N.E. Dixon, and J.E. Gready, *Characterization of carbohydrate binding of C-type lectin receptors in macrophage and dendritic cells*.

N.K. Williams, P. Prosselkov, E. Liepinsh, J.M. Matthews, G. Otting, and N.E. Dixon, *In vivo protein and peptide cyclization using a split mini-intein: solubility, reaction efficiency and product stability.*

East Coast Protein Meeting, Coffs Harbour, New South Wales, 27–29 June.

The following invited lecture was presented:

A.J. Oakley, <u>P. Prosselkov</u>, G. Wijffels, J.L. Beck, M.C.J. Wilce, and N.E. Dixon, *Structure of the sliding clamp (b) subunit of Escherichia coli DNA polymerase III at 1.85 Å*.

16th **International Mass Spectrometry Conference,** Edinburgh, Scotland, 31 August–5 September.

The following invited lecture was presented:

M.M. Sheil, J.L. Beck, R. Gupta, S. Watt, S.E. Brown, and N.E. Dixon, *Electrospray mass spectrometry of gas phase macromolecular complexes*.

ComBio2003, Melbourne, Victoria, 29 September–2 October.

The following invited lecture was presented:

<u>A.J. Oakley</u>, K.V. Loscha, P.M. Schaeffer, N.E. Dixon, and M.C.J. Wilce, *The crystal structure of the C-terminal domain of DnaG primase*.

The following poster was also presented:

<u>K.V. Loscha</u>, A.J. Oakley, P.M. Schaeffer, P. Prosselkov, B. Bancia, G. Otting, M.C.J. Wilce, and N.E. Dixon, *Expression, crystallization, and NMR studies of the helicase-interaction domain* of *Escherichia coli DnaG primase*.

6th Brisbane Inorganic Chemistry and Centre for Metals in Biology Symposia, Brisbane, Queensland, 2–3 December.

N.E. Dixon presented the plenary lecture: *Binuclear metallohydrolases: some mechanistic insights*.

N.E. Dixon presented the invited lecture: *Metals and the replisome*.

Biochemical Reactions and Molecular Recognition

Gordon Conference on Physical Organic Chemistry, Plymouth, New Hampshire, USA, 29 June–4 July

C.J. Easton presented the plenary lecture: *Molecular reactors and machines – practical outcomes and/or gross speculation.*

19th Royal Australian Chemical Institute Organic Conference, Lorne, Victoria, 6–11 July was attended by L. Barr, B.J.W. Barratt, M.M. Cieslinski, R. Dawson, A. Depraz–Depland, C.J. Easton, A. Philbrook, J.S. Simpson, Z.I. Watts and A. Wright.

The following lecture was presented:

- <u>B.J.W. Barratt</u>, C.J. Easton, L. Radom, and J.S. Simpson, *PAM enzyme inhibitors to regulate hormone production*.
- M.M. Cieslinski was awarded the best poster prize for the presentation:
- M.M. Cieslinski, C.J. Easton, H. Onagi, and S.F. Lincoln, *Cyclodextrins as components of molecular devices*.

The following posters were also presented:

- L. Barr, C.J. Easton, A.G. Meyer, and S.F. Lincoln, *b-Cyclodextrin as a molecular reactor to reverse the regioselectivity of nitrile oxide cycloadditions*.
- R. Dawson, P. Clements, C.J. Easton, and S.F. Lincoln, *Cyclodextrin complexes of 4,4'-dihydroxyazobenzene: towards a molecular piston.*
- <u>A. Depraz–Depland</u>, and C.J. Easton, *Controlled photochemical generation of superoxide radical anion*.
- <u>Philbrook</u>, C.J. Easton, and N. Dunlop, ¹*H*-¹⁵*N*-*HMQC NMR as a tool to detect co-condensation in melamine urea formaldehyde reactions.*

- J.S. Simpson, L. Barr, C.J. Easton, K. Lee, and S.F. Lincoln, *Efficient metallocyclodextrin catalysts for the hydrolysis of organophosphate triesters*.
- Z.I. Watts and C.J. Easton, Regioselectivity of photochemical chlorination of free and N-acetyl amino acids.
- C.J. Easton and <u>A. Wright</u>, *Investigation of hydrogen atom transfer between amino acids and thiols.*

Gordon Conference on Free Radical Reactions, Plymouth, New Hampshire, USA, 13–18 July.

The following poster and invited lecture was presented:

B.J.W. Barratt, C.J. Easton, L. Radom, and J.S. Simpson, *PAM enzyme inhibitors to regulate hormone production*.

39th **IUPAC Congress and 86**th **Conference of the Canadian Society for Chemistry,** Ottawa, Canada, 10–15 August was attended by L. Barr, M.M. Cieslinski and C.J. Easton.

The following invited lecture was presented:

<u>C.J. Easton</u>, B.J.W. Barratt, L. Radom, and J.S. Simpson, *Exploiting free radical chemistry to design PAM enzyme inhibitors for the regulation of hormone production*.

The following posters were also presented:

<u>L. Barr</u>, C.J. Easton, K. Lee, A.G. Meyer, and S.F. Lincoln, *Modified cyclodextrins as molecular reactors and catalysts in organic reactions*.

M.M. Cieslinski, C.J. Easton, H. Onagi,, and S.F. Lincoln, *Putting cyclodextrins to work as components of molecular devices*.

- **14**th **Southern Highlands Conference on Heterocyclic Chemistry,** Moss Vale, 7–9 September, was attended by L. Barr and J.S. Simpson.
- L. Barr received a conference postgraduate award and presented the invited lecture:
 - <u>L. Barr</u>, C.J. Easton, S.F. Lincoln, and A.G. Meyer, *Modified cyclodextrins as molecular reactors and catalysts in organic reactions.*

The following poster was also presented:

J.S. Simpson, B.J.W. Barratt, C.J. Easton, and L. Radom, *Developing PAM enzyme inhibitors to regulate hormone production*.

- 21st Japan Cyclodextrin Symposium and 2nd Asian Cyclodextrin Conference, Sapporo, Japan, 15–16 September.
 - C.J. Easton presented the plenary lecture: *Cyclodextrins as the basis of catalysts, machines and microelectronic devices*.

Frontiers of Nano-Supramolecular Chemistry Symposium, Atsugi, Japan, 18 September.

C.J. Easton presented the invited lecture: A cyclodextrin-based molecular ratchet.

Orica Emerging Science Symposium, Melbourne, 7 November was attended by C.J. Easton and A. Philbrook.

A. Philbrook presented the invited lecture: *Melamine replacements in MUF resins*.

Royal Australian Chemical Institute NSW Organic Group 24th **Annual One-day Symposium,** Sydney, 2 December was attended by M.M. Cieslinski, J.S. Simpson, Z.I. Watts, and A. Wright.

M.M. Cieslinski was awarded a best poster prize for the presentation:

M.M. Cieslinski, C.J. Easton, H. Onagi, and S.F. Lincoln, *Cyclodextrins as components of molecular devices*.

The following posters were also presented:

- B.J.W. Barratt, C.J. Easton, L. Radom, and <u>J.S. Simpson</u>, *PAM enzyme inhibitors to regulate hormone production*.
- <u>Z.I. Watts</u> and C.J. Easton, *Regioselectivity of photochemical chlorination of free and N-acetyl amino acids*.
- C.J. Easton and <u>A. Wright</u>, *Investigation of hydrogen atom transfer between amino acids and thiols*.

Australia/Japan International Joint Meeting on Food Factors and Free Radicals in Health and Disease, Kyoto, Japan, 4–7 December.

C.J. Easton presented the invited lecture: C.J. Easton, B.J.W. Barratt, L. Radom, and J.S. Simpson, *Exploiting free radical chemistry to design PAM enzyme inhibitors for the regulation of hormone production*.

Protein Crystallography and Engineering

AsCA'03/Crystal-23, Broome, WA, 10–13 August.

P.D. Carr gave the lecture: *Evolution of a organophosphate degrading enzyme; a comparison of natural and directed evolution.*

15th Lorne Cancer Conference, Lorne, Victoria, 13–16 February.

J.M. Murphy presented the lecture: *Mechanism of activation of the common b-subunit of the GM-CSF and IL-5 receptors*.

Coordination Chemistry and Spectro-electro Chemistry

P.J. Mahon presented the invited lecture: *Convolution in Voltammetry*, at La Trobe University, Melbourne on 19th March.

Organic Synthesis

19th Royal Australian Chemical Institute Organic Conference, Lorne, 6–11 July.

O.E. Hutt presented the lecture: *Towards the total synthesis of hetisine*.

Royal Australian Chemical Institute NSW Organic Group 24th Annual One-d ay Symposium, University of New South Wales, 2 December, was attended by J.R. Crow, K.A. Fairweather, L.N. Mander, M.J. McDonough, and L.T. Phuoc.

J.R. Crow was awarded the prize for the best student presentation for the lecture:

Studies directed towards the synthesis of gibberellin photoaffinity probes.

Organic Synthesis, Methodology and Host-guest Chemistry

19th Royal Australian Chemical Institute Organic Conference, Lorne, Victoria, 6–11 July was attended by M.S. Sherburn, E.S. Barrett, T.N. Cayzer, L.C.H. Kwan, N.A. Miller, E.L. Pearson, A.J. Scott, L.A. Sharp, D.J. Sinclair, C.I. Turner, and L.S.-M. Wong.

M.S. Sherburn presented the invited plenary lecture: *New strategies for polycyclic natural product synthesis*.

The following lectures were presented:

E.S. Barrett and M.S. Sherburn, Synthesis and host-guest properties of chiral cavitands.

<u>L.A. Sharp.</u> A.J. Reynolds, J. Fischer, and M.S. Sherburn, *The intramolecular radical carboxyarylation reaction: scope and application to natural product synthesis.*

A.J. Scott and M.S. Sherburn, *Total synthesis of (–)-podophyllotoxin*.

T.N. Cayzer, M.N. Paddon–Row, and M.S. Sherburn, *New insights into the stereocontrol of the intramolecular Diels–Alder reaction.*

The following posters were also presented:

R.M. Williamson, M.S. Sherburn, and <u>C.I. Turner</u>, *From sugars to steroids: four rings in one step*.

M.S. Sherburn and <u>L.S.-M. Wong</u>, *A radical approach to the total synthesis of* (+)-himbacine.

<u>D.J. Sinclair</u>, J.G. Hansen, and M.S. Sherburn, *Exploring rigid linkers for cavitand chemistry*.

G.A. Jones, <u>L.C.H. Kwan</u>, M.N. Paddon–Row, <u>E.L. Pearson</u>, C.I. Turner, and M.S. Sherburn, *New insights into the intramolecular Diels–Alder reaction*.

N.A. Miller, S. Fielder, D.D. Rowan, and M.S. Sherburn, *Synthesis and reactions of dendralenes*.

18th **International Symposium on Synthesis in Organic Chemistry,** Churchill College, Cambridge, UK, 21–24 July.

The following poster was presented:

<u>J. Fischer</u>, A.J. Reynolds, A.J. Scott, L.A. Sharp, C.I. Turner, and M.S. Sherburn, A *radical approach to the lignan class of natural products*.

39th **IUPAC Congress and the 86**th **Conference of the Canadian Society for Chemistry**, Ottawa, Canada, 10–15 August was attended by M.S. Sherburn, A.J. Scott, L.A. Sharp, C.I. Turner, and L.S.-M. Wong.

The following lecture was presented:

<u>C.I. Turner</u> and M.S. Sherburn, *A new "zipper mode" approach to steroids and related compounds.*

The following posters were also presented:

A.J. Scott and M.S. Sherburn, Total synthesis of (-)-podophyllotoxin.

L.A. Sharp, A.J. Reynolds, J. Fischer, and M.S. Sherburn, *The intramolecular radical carboxyarylation reaction: scope and application to natural product synthesis*.

L.S.-M. Wong and M.S. Sherburn, A modular total synthesis of (+)-himbacine.

7th International Conference on Calixarenes, Vancouver, British Columbia, Canada, 13–16th August.

E.S. Barrett was awarded the best student talk/poster prize for the lecture:

E.S. Barrett and M.S. Sherburn, Synthesis and host-guest properties of chiral cavitands.

13th European Symposium on Organic Chemistry, Cavtat-Dubrovnik, Croatia, 10–15 September.

The following poster was presented:

<u>T.N. Cayzer</u>, M.N. Paddon-Row, and M.S. Sherburn, *New insights into the stereocontrol of the intramolecular Diels–Alder reaction.*

Southern Highlands Conference on Heterocyclic Chemistry, Moss Vale, NSW, 7–9 September was attended by M.S. Sherburn and R. Tripoli.

M.S. Sherburn presented the invited plenary lecture: *Total synthesis via modular domino strategies*.

Royal Australian Chemical Institute NSW Organic Group 24th Annual One-day Symposium, University of New South Wales, 2 December, was attended by M.S. Sherburn, L.C.H. Kwan, N.A. Miller, E.L. Pearson, A.J. Scott, D.J. Sinclair, J. Addison–Jones, and S. Goodwin.

N.A. Miller was awarded a best student poster prize for the presentation:

N.A. Miller, S. Fielder, D.D. Rowan, and M.S. Sherburn, *Synthesis and reactions of dendralenes*.

The following posters were also presented:

- <u>D.J. Sinclair</u>, J.L. Irwin, J.G. Seitzberg, and M.S. Sherburn, *Extending the chemistry of cavitands*.
- <u>L.C.H. Kwan</u>, M.N. Paddon–Row, <u>E.L. Pearson</u>, and M.S. Sherburn, *Enantioselective catalysis of intramolecular Diels–Alder reactions*.

Structural Biology and Biophysics by NMR

- **28**th Annual Lorne Conference on Protein Structure & Function, Lorne, Victoria, 9–13 February.
 - G. Otting presented the poster: *NMR structures of AmpD, PYRIN domain, and R3H domain.*
- 10th Chianti Workshop on Magnetic Resonance, San Miniato, Italy, 25–30 May.
 - G. Otting gave the invited lecture: *Spin-labelling proteins for NMR and cross-correlation effects in COSY.*
- **5th Australian Peptide Conference,** Daydream Island, Australia, 5–10 October.
 - G. Otting gave the invited lecture: *Paramagnetic tagging of proteins: enhanced speed and accuracy of protein analysis by NMR*.
 - G. Otting visited the Karolinska Institute in Stockholm, Sweden, in May and October.

Synthesis and Mechanism

- **19th Royal Australian Chemical Institute Organic Conference**, Lorne, Victoria, 6–11 July was attended by S. Chand, J.C. Jury, O.P. Karunaratne, B.D. Kelly, D.W. Lupton, J. Renner, and P. Stanislawski.
 - D.W. Lupton presented the lecture: *The development of a new approach to indoles and its application to the synthesis of (+)-aspidospermidine.*

The following posters were also presented:

- M.G. Banwell and <u>S. Chand</u>, *Approaches to the synthesis of biologically active polyphenolics*.
- M.G. Banwell and <u>J.C. Jury</u>, *Developing chemoenzymatic routes to tricholomenyn B, an antimitotic macrolides from Tricholoma acerbum.*
- M.G. Banwell and O.P. Karunaratne, Towards a total synthesis (–)-galanthamine.
- M.G. Banwell and <u>B.D. Kelly</u>, *A chemoenzymatic approach to the decahydro-as-indacene core associated with the spinosyn class of insecticide*.

M.G. Banwell and <u>P. Stanislawski</u>, *Synthetic approaches to the homoerythrinan alkaloids*.

Gordon Research Conference on Heterocyclic Chemistry, Newport, Rhode Island, USA, 6–11 July.

M.G. Banwell presented the plenary lecture: *New strategies and protocols for the synthesis of heterocyclic natural products*.

The GSK 1st Tonbridge Summer Chemistry Symposium, Tonbridge, UK, 17 July.

M.G. Banwell presented the plenary lecture: *Newer aspects of pyrrole chemistry: teaching an old dog new tricks.*

18th International Symposium on Synthesis in Organic Chemistry, Churchill College, Cambridge, UK, 21–24 July.

M.G. Banwell presented the plenary lecture: *The application of chemoenzymatic methods to the synthesis of biologically active natural products*.

39th IUPAC Congress and the 86th Conference of the Canadian Society for Chemistry, Ottawa, Canada, 10–15 August.

M.G. Banwell presented the invited lecture: *Some aspects of pyrrole chemistry:* teaching an old dog new tricks.

Southern Highlands Conference on Heterocyclic Chemistry, Moss Vale, NSW, 7–9 September.

The following posters were presented:

 $\underline{\text{M.G. Banwell}}$ and D.T.J. Loong, A stereoselective total synthesis of the nonenolide (+)-microcarpalide.

<u>D.A.S. Beck</u> and M.G. Banwell, *The influence of chiral auxiliaries and catalysts on the selectivity of intramolecular conjugate addition of pyrrole to N-tethered Michael acceptors.*

Royal Australian Chemical Institute NSW Organic Group 24th Annual One-day Symposium, University of New South Wales, 2 December was attended by M.G. Banwell, M. Bonnet, P. Guan, N.L. Hungerford, and J. Renner.

N.L. Hungerford presented the invited lecture: *The synthesis of the silaic acid* (–)-*KDN and certain epimers from* (–)-*dehydroshikimic acid or* (–)-*quinic acid.*

The following poster was also presented:

M.G. Banwell, O.P. Karunaratne, and X.H. Ma, Attempts to develop a chemoenzymatic route to the medicinally important alkaloid galanthamine.

Disordered Materials

ICCOSS XVI, International Conference of the Chemistry of the Organic Solid State, UNSW, Sydney, 13-18 July.

T.R. Welberry gave the keynote lecture: *Diffuse scattering from organic crystals*.

Aperiodic 2003, International Conference on Aperiodic Crystals, Belo Horizonte, Brazil, 8-13 September.

T.R. Welberry gave the invited lecture: *The importance of multi-site correlations in disordered structures.*

AsCA'03/Crystal-23, Combined Meeting of the Asian Crystallographic Association and the Society of Crystallographers in Australia and New Zealand. Broome, WA, 10-13 August.

<u>T.R. Welberry</u> and R.L. Withers gave the lecture: *The importance of multi-site correlations in disordered structures*.

ANA 2003, Fifth Conference on Nuclear Science and Engineering in Australia, Canberra, 5-6 November.

The following poster was presented:

<u>D.J. Goossens</u>, T.R. Welberry, W.I.F. David, M.J. Gutmann, M.J. Bull, and A.P. Heerdegen, *Diffuse Neutron Scattering: A Powerful Technique in the Study of Molecular Crystals*.

21st European Crystallographic Meeting, Durban, South Africa, 24-29 August.

The following poster was presented:

<u>J. Kreisel</u>, P.A. Thomas, G.O. Jones, P. Bouvier, A.M. Glazer, and T.R. Welberry, *Sodium bismuth titanate*, Na_{0.5}Bi_{0.5}TiO₃, *under pressure: short-range and long-range order*.

BCA Physical Crystallography Group and the IoP Structural Condensed Matter Physics Group Winter Meeting, Abingdon, Oxfordshire, UK, 8-9 December.

The following poster was presented:

M.J. Gutmann, T.R. Welberry, D.J. Goossens, W.I.F. David, M.J. Bull, and A.P. Heerdegen, *Diffuse neutron scattering in benzil*, $C_{14}D_{10}O_2$, using the time-of-flight Laue technique.

Computational Quantum Chemistry

9th European Symposium on Organic Reactivity (ESOR 9), Oslo, Norway, 12 –17 July.

L. Radom presented the plenary lecture: *The mechanism of action of coenzyme* B_{12} .

Singapore International Chemical Conference 3 (SICC-3), Singapore, 14 December–17 December.

L. Radom presented the keynote lecture: *Free radical chemistry: stabilities and reactions.*

Liquid State Chemical Physics

Thermodynamics Conference, Cambridge, 9-11 April

D. Evans presented the lecture: *The transient fluctuation theorem and nonequilibrium free energy, theorems.*

Statistical Mechanics Meeting, Rutgers University, 18-20 May.

D. Evans presented the talk: *The fluctuation theorem – Theory and Experiment.*

News and Expectations in Thermostatistics, Sardinia, 22-28 September.

D. Evans presented the talk: *The fluctuation theorem – Theory and Experiment*

Maximum Entropy production Workshop DownUnder, Canberra, 9-10 October.

D. Evans presented the lecture: *Thermodynamics and the fluctuation theorem*.

Australian Academy of Science Symposium; Nanoscience. Where Physics, Chemistry and Biology collide, Canberra 2nd May.

D. Evans presented the lecture; *Thermodynamic limits to nanomachines*.