

Subscribing organizations are encouraged to copy and distribute this table of contents for non-commercial purposes

Biochemical Society Focused Meetings

Enzyme Mechanisms: Fast Reaction and Computational Approaches

Manchester Interdisciplinary Biocentre, U.K., 9–10 October 2008

Edited by Nigel Scrutton and Andrew Munro (Manchester, U.K.).

- Enzyme Mechanisms: Fast Reaction and Computational Approaches
Andrew W. Munro and Nigel S. Scrutton 333–335
- Insights into the mechanisms of adenosylcobalamin (coenzyme B₁₂)-dependent enzymes from rapid chemical quench experiments
E. Neil G. Marsh 336–342
- An end to 40 years of mistakes in DNA–protein association kinetics?
Stephen E. Halford 343–348
- Probing coupled motions in enzymatic hydrogen tunnelling reactions
Rudolf K. Allemann, Rhiannon M. Evans and E. Joel Loveridge 349–353
- Conformational changes in the catalytic cycle of protochlorophyllide oxidoreductase: what lessons can be learnt from dihydrofolate reductase?
Derren J. Heyes and Nigel S. Scrutton 354–357
- Time-resolved studies of radical pairs
Jonathan R. Woodward, Timothy J. Foster, Alex R. Jones, Adrian T. Salaoru and Nigel S. Scrutton 358–362
- Insights into the mechanism and inhibition of fatty acid amide hydrolase from quantum mechanics/molecular mechanics (QM/MM) modelling
Alessio Lodola, Marco Mor, Jitnapa Sirirak and Adrian J. Mulholland 363–367
- Opportunities for mesoporous nanocrystalline SnO₂ electrodes in kinetic and catalytic analyses of redox proteins
Gemma L. Kemp, Sophie J. Marritt, Li Xiaoe, James R. Durrant, Myles R. Cheesman and Julea N. Butt 368–372
- Density functional theory (DFT) and combined quantum mechanical/molecular mechanics (QM/MM) studies on the oxygen activation step in nitric oxide synthase enzymes
Sam P. de Visser 373–377
- Combining X-ray crystallography and single-crystal spectroscopy to probe enzyme mechanisms
Arwen R. Pearson and Robin L. Owen 378–381
- Tryptophan ¹³C nuclear-spin polarization generated by intraprotein electron transfer in a LOV2 domain of the blue-light receptor phototropin
Wolfgang Eisenreich, Markus Fischer, Werner Römisch-Margl, Monika Joshi, Gerald Richter, Adelbert Bacher and Stefan Weber 382–386

Ultrafast catalytic processes and conformational changes in the light-driven enzyme protochlorophyllide oxidoreductase (POR)
Olga A. Sytina, Derren J. Heyes, C. Neil Hunter and Marie Louise Groot 387–391

The bacterial respiratory nitric oxide reductase
Nicholas J. Watmough, Sarah J. Field, Ross J.L. Hughes and David J. Richardson 392–399

The petite purple photosynthetic powerpack
Michael R. Jones 400–407

Oxidation of L-tryptophan in biology: a comparison between tryptophan 2,3-dioxygenase and indoleamine 2,3-dioxygenase
Sara A. Rafice, Nishma Chauhan, Igor Efimov, Jaswir Basran and Emma Lloyd Raven 408–412

Selected oral communication

Mechanism of CB1954 reduction by *Escherichia coli* nitroreductase
Andrew Christofferson and John Wilkie 413–418

Advances in Nucleic Acid Detection and Quantification

Hinxton Hall, Cambridge, U.K. 28–29 October 2008

Edited by Simon Baker (Oxford Brookes, U.K.), Jeremy Gillespie (Thermo Fisher Scientific, U.K.), Simon Hughes (Oxford Gene Technology, U.K.), Ian Kavanagh (Thermo Fisher Scientific, U.K.) and Devin Leake (Thermo Fisher Scientific, U.S.A.).

Nucleic acid detection and quantification in the developing world
Jim Huggett, Clare Green and Alimuddin Zumla 419–423

Miniaturized PCR systems for cancer diagnosis
Philip J.R. Day 424–426

COLD-PCR: a new platform for highly improved mutation detection in cancer and genetic testing
Jin Li and G. Mike Makrigiorgos 427–432

Mutation scanning using high-resolution melting
Claire F. Taylor 433–437

PCR in forensic genetics
Niels Morling 438–440

Functionalized nanoparticles for nucleic acid sequence analysis using optical spectroscopies
Duncan Graham, Karen Faulds, David Thompson, Fiona Mackenzie, Robert Stokes and Alexandra Macaskill 441–444

Optical fibre-based detection of DNA hybridization
Anna V. Hine, Xianfeng Chen, Marcus D. Hughes, Kaiming Zhou, Edward Davies, Kate Sugden, Ian Bennion and Lin Zhang 445–449

Genomic DNA amplification by the multiple displacement amplification (MDA) method
Roger S. Lasken 450–453

Selected oral communications

The single-nucleotide primer extension (SNUPE) method for the multiplex detection of various DNA sequences: from detection of point mutations to microbial ecology

Marcell Nikolausz, Antonis Chatzinotas, András Táncsics, Gwenaël Imfeld and Matthias Kästner

454–459

The SAFE project: towards non-invasive prenatal diagnosis

Deborah G. Maddocks, Medhat S. Alberry, George Attilakos, Tracey E. Madgett, Kin Choi, Peter W. Soothill and Neil D. Avent

460–465

Dissolved oxygen alteration of the spectrophotometric analysis and quantification of nucleic acid solutions

Rupak Doshi, Philip J.R. Day and Nicola Tirelli

466–470

Real-time DNA microarrays: reality check

Alexander Chagovetz and Steve Blair

471–475

Correction

477
