

### Session I — Opening

- T1 Radiation chemistry: a century of progress, but where next?  
*Peter Wardman, Gray Institute, UK*

### Session II — Interfaces

- T2 Electron Stimulated Reactions in Thin Water Films Adsorbed on TiO<sub>2</sub>(110) and Pt(111)  
*G. A. Kimmel and N. G. Petrik, Pacific Northwest National Laboratory*
- T3 Radiation-Corrosion Interaction in Extreme Environments in Nuclear Energy Systems  
*Gary S. Was, University of Michigan*
- T4 Fundamental aspects of interfacial radiation chemistry  
*Robert A. Crowell, Brookhaven National Laboratory*

### Session III — Instrumentation

- T5 Methodological developments at "Laboratoire de Radiolyse"  
*J.-P. Renault, CEA Saclay, France*
- T6 Future directions in pulse radiolysis instrumentation  
*James F. Wishart, Brookhaven National Laboratory*
- T7 Nature and dynamics of excitons and charges in optoelectronic materials  
*Laurens D.A. Siebbeles, Delft University of Technology, The Netherlands*

### Session IV — Instrumentation

- T8 Radiation – Matter Interaction: Basic and Applied Research with Laser and Accelerator at Bhabha Atomic Research Centre  
*Sisir K. Sarkar, Bhabha Atomic Research Centre, India*
- T9 Recent experiments and developments at ELYSE picosecond electron accelerator  
*Jean-Louis Marignier, Vincent de Waele, Mehran Mostafavi, H. Monard, J.P. Larbre, F. Gobert, Uli Schmidhammer, Pierre Jeunesse, Alexandre Demarque, R. Herren and J.R. Bazouin, ELYSE– France*
- T10 Ionizing Radiation Induced Chemical Dynamics Studied with Ultrafast X-ray Laser Radiation  
*Kelly J. Gaffney, SLAC National Accelerator Laboratory and Stanford University*

### Session V — Low-energy electrons

- T11 Low-energy electron interactions with hydrated DNA  
*Thomas M. Orlando, D. Oh, Y. Chen, and A. Alexandrov, Georgia Institute of Technology*
- T12 Fundamental low energy electron – biomolecule interactions and their applications  
*Sylwia Ptasinska, Open University, UK*

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## Oral presentation abstracts

### Session VI — Nuclear energy

- T13 Application of Radiation Chemistry Research in the Nuclear Industry  
**Craig R. Stuart** and Glenn A. Glowa, Atomic Energy of Canada Limited, Canada
- T14 Radiation Chemistry and the Nuclear Fuel Cycle  
**Bruce J. Mincher**, Idaho National Laboratory
- T15 Short- and long-term radiation chemistry challenges in spent fuel management  
**Barbara Pastina**, Saanio & Riekkola Oy, Finland

### Session VII — Biochemical and space applications

- T16 Radiation-induced Free Radical Processes in Peptides  
**Krzysztof Bobrowski**, Institute of Nuclear Chemistry and Technology, Poland
- T17 Free radicals reactions in peptides and proteins  
**Chantal Houée-Lévin**, Université Paris Sud, France
- T18 Extraterrestrial Radiation Chemistry and Molecular Astronomy  
**Reggie L. Hudson**, Marla H. Moore, NASA Goddard Space Flight Center

### Session VIII — Heavy ions

- T19 Ion Beam Radiation Chemistry relevant to Radiation Therapy  
**Y. Katsumura**, The University of Tokyo and Japan Atomic Energy Agency, Japan
- T20 High LET effects in organic solids  
**E. Balanzat**, Y. Ngon-Ravache, CIMAP, CEA-CNRS-ENSICAEN, France
- T21 Radiolysis of Simple Aromatic Compounds  
**Jay A. LaVerne**, Notre Dame Radiation Laboratory

## Radiation Chemistry in the 21<sup>st</sup> Century

### Session IX — Materials and polymers

- T22 Radiation Chemistry Concerning Reaction Mechanisms  
**Tetsuro Majima**, Osaka University, Japan
- T23 Radiation chemistry of polymers – some opportunities and trends  
**Piotr Ulanski**, Technical University of Lodz, Poland

### Session X — Fundamental interactions

- T24 Stochastic Simulation of Heavy Ion Radiolysis of Aqueous Systems  
**Monica Huerta-Parajon**, Jay A. LaVerne, and **Simon M. Pimblott**, University of Manchester, UK
- T25 Radiation-Induced Reactions in Water at High Temperature and Pressure  
**David M. Bartels**, Notre Dame Radiation Laboratory
- T26 Unraveling the reaction dynamics initiated by electronic excitation of water  
**Chris Elles**, **Chris Rivera**, **Tom Zhang**, **Piotr Pieniazek**, **Anna Krylov**, **Stephen Bradforth**, **Joost VanVondele**, and **Pavel Jungwirth**, University of Southern California