

IRPS BULLETIN

Newsletter of the International Radiation Physics Society

Volume 32 No 1

March, 2018

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From the Editors

Dear Colleagues,

This issue of The IRPS Bulletin is devoted largely to the election of society officers, including regional vice presidents and executive councillors. Within you will find biographical information, photos, and statements from the candidates that have agreed to serve. As always, write in candidates are welcome as well. Besides being an informed voter, this may give a sense of future directions of the Society and innovative roles that you may play. Please note that submission instructions are provided with the ballot, and they indicate a deadline for receipt by 17 August 2018. While a postal address is given, electronic scans of your ballot may

be received as an email attachment by the Society Secretary, Professor Jorge E. Fernandez at

Jorge.fernandez@unibo.it

The results will be announced at ISRP-14, 7-11 October 2018, in Córdoba, Argentina. Speaking of which, please reserve these ISRP dates on your calendar and join us for this outstanding symposium hosted in a wonderful setting. More information about ISRP-14 is expected to be forthcoming in a summer issue of this Bulletin.

Until then, best wishes in your endeavors.

Larry Hudson and Ron Tosh

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Internet Address : <http://www.canberra.edu.au/irps>

FROM THE PRESIDENT

Towards the pinnacles of Argentina

Congratulations to all on this Election-Slate Bulletin. Thanks and appreciation for all who are nominated and standing. And for the tireless work of the nominating committee. The CV's attached read like a Who's Who and have many entertaining details and, indeed, memories. With the receipt of this Bulletin, the election slate will have been sent to all members for their votes to be returned, as indicated in the enclosed. Do read them and send your responses back as requested to the returning officer.

The programme for our 14th International Symposium on Radiation Physics (ISRP-14) at Córdoba is looking to be quite exciting, including excursions. I am sure the local organisers might have something to say in the following Bulletin about possible side-trips, hikes, drives and excursions if you have the time and capacity. The 21-day hike to Aconcagua might be a little tough; a side-trip to Machu Picchu in deepest darkest Peru for 4 days might be more reasonable, or some more local hikes North or South, East or West of Córdoba might fit in and be attractive.

But the best part will be the science and the community. In looking forwards at the election slate I can safely believe that the election outcome will be excellent for the Society. Our planning for the future meetings and conferences is well under way, and the next three years will have plenty of challenges and opportunities for all.

Many of the invited talks look really interesting and worth the trip, and will, I believe, cross some fields and barriers that we do not often cross. The discussions about that will be well worthwhile and may lead to new collaborations and a better understanding of the science.

Hence with this issue I wish you all very well, as I prepare to find some crampons and a mountain stick to scale the heights of Science at Córdoba!

Chris Chantler



ELECTION BALLOT FORM

For all posts, except those of executive councillors, vote for one by marking the appropriate box.
 For executive councillors, you may vote for up to four candidates who are running
 for the full six-year term.

For all positions you may write in names of other members of the Society and cast your ballot for them.

President *(vote for one)*

David Bradley (UK) _____

Secretary *(vote for one)*

Jorge Fernandez (Italy) _____

Treasurer *(vote for one)*

William Dunn (USA) _____

Vice Presidents :

Western Europe *(vote for one)*

José Ródenas (Spain) _____

Central & Eastern Europe *(vote for one)*

Ladislav Musilek (Czech) _____

F.S.U *(vote for one)*

Sultan Dabagov (FSU) _____

North America *(vote for one)*

Lawrence Hudson (USA) _____

South & Central America *(vote for one)*

Marcelo Rubio (Argentina) _____

Vice Presidents *(Continued)*

South East Asia *(vote for one)*

Iqbal Saripan (Malaysia) _____

North East Asia *(vote for one)*

Yu-Hui Dong (P.R.China) _____

Africa & Middle East *(vote for one)*

Mohamed Gomaa (Egypt) _____

Australasia & Oceania *(vote for one)*

James Tickner (Australia) _____

IRMMA/Industrial Applications

(vote for one)

John Mattingly (USA) _____

Membership Officer *(vote for one)*

Eric Shirley (USA) _____

Executive Councillors :

Six year term *(vote for four)*

Richard Hugtenburg (UK) _____

Zdravko Siketić (Croatia) _____

Pedro Vaz (Portugal) _____

Mark Bailey (Denmark) _____

Please use this ballot to vote. Instructions for return :

- 1) Regular mail :** Use the double-envelope system (place ballot in a small, unsigned envelope, and enclose the latter in a larger envelope, signing and printing your name and return address on the latter to authenticate your anonymous ballot) and send to

Prof. Jorge E. Fernandez, IRPS Secretary
Laboratory of Montecuccolino, Department of Industrial Engineering (DIN)
Alma Mater Studiorum, University of Bologna via dei Colli, 16-40136, Bologna, Italy

- 2) Electronic submission :** Scan your completed ballot and email the image to jorge.fernandez@unibo.it

Ballots must be received by the Secretary by 17 August, 2018

The results will be announced at ISRP-14, 7-11 October, 2018.

INFORMATION FOR ELECTION OF COMMITTEE MEMBERS AT ISRP - 14, October, 2018

Profile of Member Standing for President

David Bradley

Sunway University, Malaysia



Professor Bradley, Emeritus Professor at the University of Surrey and currently Head of the Centre for Radiation Sciences at Sunway University in Malaysia, has an established standing in the field of applied nuclear and

radiation physics. To-> 4000 citations. His work has also led to a number of commercial applications, with contributions that have underpinned the formation of two University spin-out companies, TrueInvivo Ltd in the UK and Lumisyns Sdn. Bhd. in Malaysia, both developing luminescence systems for medical dosimetry.

Professor Bradley has held several major international roles: Member of the British Standards Institute (BSI) NCE/2 Radiation Protection and Measurement Group and the Protect Team PT 62945 project Computed Tomography (CT) Security-Screening Systems; Consulting Editor (previously Editor-in-Chief)

of the Elsevier Journals Applied Radiation & Isotopes and Radiation Physics and Chemistry; Editor-in-Chief of the British Journal of Radiology; Member of Board of Directors of The International Centre for Environmental and Nuclear Sciences (ICENS), University of the West Indies; Executive Councillor of the International Radiation Physics Society (IRPS), 2015-2018, previously Secretary of IRPS for a six-year period.

Professor Bradley has also been the recipient of a number of international awards including the Institute of Physics and Engineering in Medicine (IPEM) Academic Gold Medal 2016 and the JARI Medal (Medal of the Journal of Applied Radiation and Isotopes), 2009 'In recognition of outstanding contributions to the field of Radiation Physics,' also receiving the accolade of Academic Icon at the University of Malaya, 2012 to 2016.

Professor Bradley has been successful in developing a strong grant portfolio and has supervised the work of some 25 PhD students and 5 postdoctoral research associates.

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.../Profile of Member standing for Secretary

Profile of Member Standing for Secretary

Jorge Fernandez

University of Bologna, Italy



After obtaining his M.Sc. in Physics (1977) and his Ph.D. in Physics from the University of Cordoba in Argentina (1985), Professor Fernandez was a Researcher in atomic and nuclear spectroscopy at institutes in Buenos Aires and Cordoba.

His interest is mainly in the fundamental physics of the interaction of x-rays with matter including polarisation effects and its implications for applications. In particular:

- Modelling of X-ray interactions
- Transport models (deterministic and Monte Carlo) for polarised and unpolarised photons, and for charged and neutral particles.
- Coupled transport problems involving photons and charged particles.
- Problems of multiple scattering.
- Spectroscopic techniques using X-rays (EDXRS, XANES, electron microprobe, computed tomography),
- Applications of X- and gamma rays to industrial diagnostics, medical physics, environmental physics, and cultural heritage (non-destructive methods),
- Solution of inverse problems in X-Ray Spectrometry,
- Characterization of the response function of radiation detectors.

He is the author of over 120 articles in scientific journals, many as invited contributions, 3 books, 1 patent and several computer codes (SHAPE, MSXRF, MCSHAPE, etc) related to XRS, photon transport and the interactions of x-rays with matter.

He organised the European EDXRS Conference in 1998, the 5th International Topical Meeting on Industrial Radiation and Radioisotope Measurement Applications (IRRMA-5) in 2002, the European Conference on X-Ray Spectrometry (EXRS-2014) in 2014 and the International Forum on Advances in Radiation Physics (FORUM BA-2017) in 2017. Actually he continues as a Member of the International Advisory Committee for the European Conferences on X-Ray Spectrometry and of the Organizing Committee of the IRRMA Conference.

In 2007 he acted as co-chair of both the Scientific Committee of the pollux.fis.uc.pt/isrp10/ and the satellite pollux.fis.uc.pt/isrp10/workshop/.

Additionally, he is editor for Applied Radiation and Isotopes (ARI) and Editorial Board Member for X-Ray Spectrometry.

He currently serves the International Radiation Physics Society as Secretary (elected in 2015).

Statement : I have been a member of the International Society of Radiation Physics from its foundation in 1985. I fully endorse the objectives of the Society of promoting the global exchange and integration of scientific information pertaining to the interdisciplinary subject of radiation physics. My intention as Secretary is to maintain and improve the high scientific level of the Society symposia (ISRP's), bringing this conference to countries interested to increase their activities and to attract young scientists to the subject.

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.../Profile of Member standing for Treasurer

Profile of Member Standing for Treasurer

William Dunn

Kansas State University, U.S.A.



Dr Dunn received his M.S. and Ph.D. degrees in Nuclear Engineering from North Carolina State University. He has been a long-standing member of the radiation physics community and was an early member of IRPS, having attended the third Symposium at Ferrara in 1985.

Dr. Dunn worked for five years at Carolina Power and Light Company, where he served as an in-house Nuclear Engineering consultant. While there, he conducted radiotracer studies at the H.B. Robinson Nuclear Power plant. He next was employed by North Carolina State University, where he oversaw applications of the PULSTAR research reactor. Bill moved full-time into the research community in 1982, taking a position at Research Triangle Institute, where he performed research on dosimetry in computed tomography and measurement of lubricant thickness on hypodermic needles.

He is the originator of the Symbolic Monte Carlo method for solving inverse problems using only a single Monte Carlo simulation.

In 1988 Dr. Dunn co-founded, with his colleague Dr. Fearghus O'Foghludha, Quantum Research Services, Inc., a research and services firm, where he spent fourteen years as President. His research involved radiation effects on electronics, measurement of relative motion using plastic scintillating fibers, development of models for albedo and transmission in slabs, novel X-ray fluorescence measurement techniques, and measurement of hidden corrosion in aircraft.

In 2002, Dr. Dunn returned to academia, assuming the position of Associate Professor in the Mechanical and Nuclear Engineering (MNE) Department at Kansas State University (KSU). Dr. Dunn is now Professor and Department Head of the MNE Department at KSU and is also Steven M. and

Kay L. Theede Chair in Engineering.

Dr. Dunn's research interests are concerned primarily with radiation measurement applications, including quantitative analysis, imaging, radiogauging, and radiotracing. He also has an active interest in particle transport analysis, particularly using Monte Carlo methods.

Bill and his colleague, Dr. Ken Shultis, authored a book, published in April, 2011, entitled *Exploring Monte Carlo Methods*. He and another colleague, Dr. Douglas McGregor, have written an extended chapter on Gamma-Ray Spectroscopy, published by Springer as Ch. 17 in the *Handbook of Particle Detection and Imaging* (2012). Bill is a member of the American Nuclear Society and has been involved in the series of Industrial Radiation and Radioisotope Measurement Applications (IRRMA) meetings, the eighth of which he chaired in June of 2011. Dr. Dunn is an author or co-author of four patents.

Bill has served IRPS as an Executive Council member, as Vice President for North America, and as Treasurer. He has managed the IRPS US bank account since March 2010.

Statement: I support the International Radiation Physics Society as a home where those of us who value developments in radiation physics can share our ideas and interact with others of like mind. Our society is unique in many ways. It encourages involvement of members from around the world, including those from developing countries. It chooses to host its meetings at locations that span the globe, allowing attendance, at least occasionally, by those who live in what some may consider remote locations. It has avoided the common practice of charging high membership fees, preferring instead to make do on a modest budget. My vision of the Society is that it is evolving into the pre-eminent international organization through which radiation physics is discussed, developed, and appreciated. I am an engineer by training but a physicist at heart. I embrace the mission of the Society and pledge, if elected, to do my best to help the Society grow and prosper.

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.../Profile of Member standing for Vice President. Western Europe

José Ródenas

Polytechnic University of Valencia, Spain



Professor José Ródenas was born in Valencia, Spain, on 22 January 1949. Graduated in 1972, Industrial Engineering, at the Polytechnic University of Barcelona, Spain. Obtained in 1981 his PhD in Nuclear Engineering at the Polytechnic University of Valencia (UPV), Spain.

Associate Professor of Nuclear Engineering in 1984 and Full Professor of Nuclear Engineering in 2003, always at the Polytechnic University of Valencia, Spain.

Head of the Nuclear Unit, Department of Chemical and Nuclear Engineering, Polytechnic University of Valencia, from 2004 to 2008.

Teaching activities (Master and PhD levels) on Nuclear Technology, Nuclear Physics, Radioactive Protection, Environmental Problems of Nuclear Energy, Radioactive Contamination, Fuel Cycle and Nuclear Materials.

Scientific and research activities on Environmental Radioactivity, Dose Calculations, Shielding Analysis, Radioactive Protection, Thermohydraulics, Monte Carlo Applications Criticality Analysis, Detector Calibration,

Medical Accelerators, Radiotherapy Treatment Planning and others, with more than 100 publications in international journals (SCI/JCR) like *Annals of Nuclear Energy*, *IEEE on Nuclear Energy*, *Journal of Nuclear Science and Technology*, *Radiation Protection Dosimetry*, *Physics in Medicine and Biology*, *Medical Physics*, *Applied Radiation and Isotopes*, *Radiation Physics and Chemistry*, *European Journal of Radiology*, *Nuclear Instruments and Methods in Physics Research*, *Nuclear Technology*, *X-Ray Spectrometry*, *Radiation Research*, *IEEE Transactions on Nuclear Science*, *Nuclear Science and Engineering*, *Nuclear Engineering and Design*, *Progress in Nuclear Energy*, among others.

Guest Editor of *Applied Radiation and Isotopes*. Managing Guest Editor of *Radiation Physics and Chemistry*.

Several books published (in Spanish), among them the following:

- *Problemas Ambientales de la Energía Nuclear*, Universidad Politécnica de Valencia, IBERDROLA, 1994. [*Environmental Problems of Nuclear Energy*]
- *Tecnología Energética 4. Energía Nuclear*, Universidad Politécnica de Valencia, 1995. [*Energy Technology*]
- *Introducción a la Ingeniería de la Contaminación Radiactiva*, Intertécnica, Valencia, 2003. [*Introduction to the Engineering of Radioactive Contamination*]

Member of the Nuclear Spanish Society (SNE), the Spanish Society of Radiological Protection (SEPR), the International Radiation Physics Society (IRPS) and correspondent member of EURADOS.

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Secretary of CHERNE (Cooperation for Higher Education on Radiological and Nuclear Engineering) since its creation in 2005 till 2015 when he resigned.

General Chairman of the Workshops on European Cooperation for Higher Education and Research in Nuclear Engineering and Radiological Protection held in Valencia in 2005 and 2006.

Chairman of the Scientific Committee of the Workshops on European Cooperation for Higher Education and Research in Nuclear Engineering and Radiological Protection held in Prague in 2007, Favignana (Italy) in 2008, Jülich (Germany) in 2009, Coimbra (Portugal) in 2010, Brussels (Belgium) in 2011, Athens (Greece) in 2012, Salamanca (Spain) in 2013, Thessaloniki (Greece) in 2014. Chairman of the International Program Committee, Minsk (Belarus) in 2015. Member of the Scientific Committee, Cervia (Italy) in 2016 and Covilhã (Portugal) in 2017.

Member of the Technical Program Committee of the International Conference "Monte Carlo 2005" held in Chattanooga, Tennessee, USA (17-21 April 2005), organized by the ANS Radiation Protection and Shielding Division on the topic The Monte Carlo Method: Versatility Unbounded in a Dynamic Computing World. Member of the Technical Program Committee of the Second International Conference on Physics and Technology of Reactors and Applications (PHYTRA2) held in Fez, Morocco, in 2011.

Member of the Scientific Committee of the 7th International Topical Meeting on Industrial Radiation and Radioisotope Measurement Application, IRRMA 7 held in Prague in 2008; the 8th International Topical Meeting on Industrial Radiation and Radioisotope Measurement Application, IRRMA 8, held in Kansas City (US) in 2011; and the 1st International Conference on Dosimetry and its Applications, held in Prague in 2013.

Member of the Scientific Program Committee of the 13th International Symposium on Radiation Physics, ISRP-13 held in Beijing (China) in 2015. Member of the Joint International Advisory and Programme Committee of ICDA-2, 2nd International Conference on Dosimetry and its Applications, held at the University of Surrey, Guildford, UK, in 2016. Member of the Technical Committee of the 10th International Topical Meeting on Industrial Radiation and Radioisotope Measurement Applications (IRRMA-X) held in Chicago, Illinois, USA, in 2017.

Prof. Ródenas organized the 9th International Topical Meeting on Industrial Radiation and Radioisotope Measurement Applications, **IRRMA-9** (www.irrma-9.webs.upv.es) at UPV from 6 to 11 July 2014 with 200 participants from 30 countries, being the Chairman of both the Organizing and Scientific Committee. Selected papers presented at IRRMA-9 will be published in a Special Issue of Radiation Physics and Chemistry, being Prof. Ródenas the Managing Guest Editor of this Special Issue.



.../Profile of Member standing for Vice President, Central and Eastern Europe

Profile of Member Standing for Vice President, Central and Eastern Europe

Ladislav Musilek

Czech Technical University, Prague



Prof. Ladislav Musilek graduated from the Czech Technical University in Prague, Faculty of Technical and Nuclear Physics (renamed later to Nuclear Sciences and Physical Engineering), Prague, Czech Republic (specialisation: Dosimetry and Application of Ionising Radiation), gaining his PhD from CTU Prague in 1977.

In 1983 he became Associate Professor of nuclear and subnuclear physics (CTU Prague) and Professor of experimental physics (CTU Prague) in 1996. Appointments at the University included Vice-Dean, Dean, and Vice-Rector for Science and Research of the CTU in Prague.

Teaching activities have included lectures in MSc and PhD courses and supervising of MSc and PhD theses. He is a member of the commission for the defence of PhD theses in Nuclear Engineering, and has significant participation in preparing programmes in radiation physics, dosimetry and application in the framework of Nuclear Engineering Courses at the Faculty.

His scientific and research activities have included:

- Technical applications of radionuclides, especially transmission and scattering of gamma-ray beams,
- Integrating dosimetric methods,
- Radioanalytical methods in the environment and in cultural heritage,

- Building a laboratory for applying methods of the exact sciences in historic monument research (funded by grants of the Ministry of Education, Youth and Sports of the Czech Republic).

Professor Musilek has authored/co-authored : 2 books; 5 chapters in books written by teams; over 150 scientific papers in journals and conferences; 7 Textbooks for students; 2 patents; he participated in preparing technical standards in a field of ionising radiation.

He has been member of a few scientific boards, he was a member of the External Advisory Group "Fission" in the EURATOM section of the EU 5th Framework Programme 2000-2002 and a representative of the Czech Republic in the Consultative Committee EURATOM-Fission of the EU 7th Framework Programme and a Czech expert in the Consultative Committee EURATOM-Fission of the EU Horizon 2020 Programme, he is a member of the Union of Czech Mathematicians and Physicists, and the Czech Society of Radiation Physicists in Medicine.

Professor Musilek was Vice President of the International Radiation Physics Society for Central and Eastern Europe since 1997, President 2012 - 2015 and has been Chairman of the IRPS Advisory Board since 2015. He is an Associate Editor of the Elsevier journal Radiation Physics and Chemistry.

Statement:

My reasons for membership of Council are:

- a) The whole professional record.
- b) Some parts of the world have become anti-nuclear and anti-radiation. It is necessary to promote these sciences.
- c) IRPS and conferences co-organised by IRPS are good platforms for international links, collaboration and exchange of knowledge.
- d) Radiation physics is not only my job, but also my hobby.

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.../Profile of Member standing for Vice President, F.S.U

Sultan Dabagov

INFN, Italy and MEPhi, Russia



Sultan Dabagov began his research career as a student in 1980, investigating surface effects in solids at the Kabardino-Balkarian State University, and completed his undergraduate work in the Dept. of Physics, Moscow State University and the I.V.

Kurchatov Institute of Atomic Energy (KIAE), under the supervision of Prof. M.A. Kumakhov, head of the laboratory for Electromagnetic Interactions, KIAE.

His undergraduate and postgraduate research was mostly dedicated to the development of the quantum theory of coherent and incoherent scattering of relativistic electron beams in oriented crystals.

During 1991-92 Dabagov performed studies at the Institute of Physics Astronomy (Aarhus University) by the invitation of Profs. J. Lindhard and J.U. Andersen. The joint research was devoted to the investigation of ion, neutron and electron beams scattering in high T superconductors (HTSC), especially channeling and channeling radiation of MeV- electrons in Y-Ba-Cu-O crystals, to be used as a novel technique for investigating characteristics of HTSC. In 1992 Dabagov was nominated as a Research Director at the International Institute for Roentgens (a former KIAE Laboratory), which aimed at the development of novel beams optics based on capillary/polycapillary systems.

During the period of 1992-1995 Dabagov proposed and developed the wave theory for neutral particles passing through capillary structures (from micro/surface to nano/bulk channeling) that allowed new features of

X-rays and thermal neutrons propagation in periodical structures to be predicted and observed successfully; within the project at the Hahn-Meitner Institute (by the invitation of Prof F. Mezei) together with Kumakhov, he has realized the first neutron capillary bender.

During 1994-1998 Dabagov led the project at the Laboratory for High Energy Electrons of P.N. Lebedev Physical Institute RAS by the invitation of Acads. O.N. Krokhin and V.L. Ginzburg that was dedicated to studying coherent phenomena in SR focussing by means of various capillary/polycapillary systems.

Since 1998 Dabagov has performed his research within the framework of the international projects on channelling of X-rays and neutrons in various capillary-based structures at the National Institute of Nuclear Physics (INFN) and led the group at the National Laboratories of Frascati (LNF).

Dabagov was a principal investigator of a number of projects at both INFN and CERN on the interaction of charged and neutral particles in strong external fields of various origins within the research program on the advanced techniques of particle acceleration and novel powerful sources of electromagnetic radiation.

Since 1990, Dabagov has participated in many Soviet Union, Russian, Former-Soviet States, European and USA conferences, workshops, and schools as a member of Advisory Boards, Program and Organizing Committees. He is the chairman of the International "Channeling" conference "Charged and Neutral Particles Channeling Phenomena" and the organizer of the International permanent seminar "Advanced Accelerator & Radiation Physics."

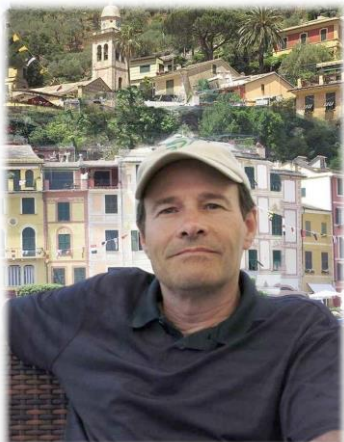
Presently, Dabagov, Dirigente di Ricerca, INFN, is the head of new LNF laboratory XLab Frascati, and Professor of National Research Nuclear University MEPhi.

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.../Profile of Member standing for Vice President, North America

Lawrence Hudson

National Institute of Standards and Technology, U.S.A.



Since 1990, Larry Hudson has worked as a physicist at the National Institute of Standards and Technology (NIST), USA. Dr. Hudson's career began as a flight controller for the US Space Shuttle Orbital Flight Test Program

before attending graduate school at Vanderbilt University with NASA support to work on radiation interactions with surfaces in the space environment. Later at NIST, this theme continued with work on the pre- or post-flight calibrations of five x-ray astronomy platforms for NASA.

At NIST Hudson leads a program that produces custom-designed calibrated curved-crystal spectrometers that are fielded to help characterize the performance and spectra from unconventional x-ray sources including the electron beam ion trap, the electron cyclotron resonance ion source, advanced medical radiography sources, laser-produced plasmas, terawatt pulsed accelerators, ultrafast petawatt lasers, and inverse-Compton backscatter sources. Producing over 115 archival publications, this work is rooted in a culture of instrument making and an infrastructure of fundamental precision metrology efforts, including absolute x-ray wavelength determination (at the femtometer level) in support of high-accuracy transfer standards needed in fundamental and applied spectroscopy experiments at US national laboratories and around the world.

After the deliberate contamination of the US mail with anthrax, Hudson assisted in design and coordination of experiments for the White House Task Force on Mail Irradiation resulting in the development of the protocol still in use to sanitize government mail with industrial x-ray sources. With sponsorship of the US Department of Homeland Security, Hudson currently serves as the NIST project leader for the development of national and international measurement standards needed to test and evaluate the technical performance and radiation safety of the nation's x-ray and gamma-ray security screening systems in all venues in which they are deployed. This is accomplished through a corpus of new documentary standards, test methods, test artifacts, dosimetry protocols and technical guidance documents, supported by NIST measurement science and computational modeling. This work fills well-documented gaps in transportation and commercial security that have been highlighted in Executive and Legislative requirements for 100 % screening of baggage, cargo, and airline passengers.

Statement: Having had the privilege of co-editing of the Bulletin of IRPS for the last thirteen years, and previously serving as an Executive Councillor and Vice President of the Society, I have been well positioned to observe the high spirit and quality of the leadership, participants, and the mission of IRPS. I am particularly impressed by the breadth of the radiation physics and geography represented at the Symposia. It is my intent that the Society continues to make the fruitful interconnections across both subject matter and geography that will advance our common causes within the radiation physics community.

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.../Profile of Member standing for Vice President, South and Central America

Profile of Member Standing for Vice President, South and Central America

Marcelo Rubio

CEPROCOR, Argentina



Marcelo Rubio, married, has two children, and is a physicist at the Centro de Excelencia en Productos y Procesos de Córdoba (CEPROCOR) in the Province of Córdoba, Argentina.

He has worked in the Radiation Laboratory of CEPROCOR since 1995. He also teaches at the Faculty of Mathematics, Astronomy and Physics (FAMAF) at the University of Córdoba since 1978 and is Member of the Scientific Research Career of CONICET of Argentina.

During the period 1988-1992 he was Vice-Dean of the Faculty.

After obtaining his M.Sc. in Physics (1978) and his PhD in Physics from the University of Córdoba (1985), Professor Rubio became a researcher in atomic and nuclear spectroscopy, with international research activities in Brazil and Italy, being responsible for developing research projects for Argentina in the Frascati and Campinas synchrotron laboratories.

He developed postdoctoral activities at the University of Rome "La Sapienza" in Medical Physics, later serving as President of the Medical Physics Society of Argentina in 1991-1993. His research progressed from fundamental parameters applied to XRF spectroscopy, to diagnostic radiology, characterization of biopolymers by SR μ XRF and X-ray microtomography. Dr. Rubio is author of 50 scientific publications in international journals and more than 60 scientific papers published as proceedings of international conferences, prospective studies from Latin America or virtual items. He is the author or coauthor of six book chapters on XRF subjects and scientific opinion.

In the field of science policy activities, Dr. Rubio was Secretary of State for Science and Technology of the Province of Córdoba (1995-1999) and Director of the Scientific Advisory Council of the National Government (2000-2001). In 2008 he served on the National Government as President of the National Funding Agency of Argentina, and since 2009, Dr. Rubio has returned to his research and academic activities.

Dr. Rubio was one of the founders of CEPROCOR and manager of the μ Sat VICTOR project launched successfully in 1996 as the first microsatellite of Argentina. He is also the chair of the forthcoming

<https://isrp14.cba.gov.ar/>

October 7-11, 2018 - Córdoba, Argentina.

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.../Profile of Member standing for Vice President, South East Asia

Profile of Member Standing for Vice President, South East Asia

Iqbal Saripan

Universiti Putra Malaysia, Malaysia



Prof. M. Iqbal Saripan obtained his B.Eng. Electrical-Electronics Engineering at Universiti Teknologi Malaysia and PhD at the University of Surrey, United Kingdom, in the area of digital image processing (nuclear medical image acquisition).

He was appointed as a senior lecturer at the Department of Computer & Communication System Engineering, Faculty of Engineering, Universiti Putra Malaysia (UPM) in 2008. He was promoted to Associate Professor in 2011 and later received his full Professorship in 2014.

He was previously appointed as a Visiting Researcher at Dammam University Saudi, Lawrence Berkeley National Laboratory USA and University of Surrey UK. He has delivered a number of keynote and plenary speeches in many international conferences. His area of research is in medical image processing, particularly involved with radiation measurement and imaging, such as SPECT, PET and CT. His current H-index is 13.

He is currently the Deputy Vice Chancellor (Academic and International), UPM.

Previously, he was appointed as the Director of Quality Assurance Centre (CQA), Deputy Dean (Postgraduate Studies) and Head of Department at the Faculty of Engineering, UPM.

He was the recipient of Top Research Scientist Malaysia (TRSM), 2013 National Young Scientist Award and 2012 The Young Outstanding Malaysian Award (TOYM). In 2016, he has received an alumnus of the year for University of Surrey. He is listed as Top Ten Creative Young Malaysian by Top Ten Magazine in 2015. Other than that, he has also received the Travel Bursary Award ISRP Melbourne (International Radiation Physics Society), twice the Best Paper Award in San Francisco and London, GOLD medal in Geneva, GOLD medal in PECIPTA, SILVER in MTE, UPM Excellent Young Researcher Award and UPM Excellent Consultant Award.

In Institute of Electrical and Electronics Engineers (IEEE) Malaysia, he was the Chair for IEEE Graduate and Last Decade (GOLD) Chapter in 2010-2011; Vice Chair for IEEE Consumer Electronics in 2009 until 2012; and Vice Chair for IEEE Signal Processing in 2014 until now. He is also a Chartered Engineer with Engineering Council UK since 2015 and has become a panel evaluation member of Institute of Physics and Engineering Council UK.

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.../Profile of Member standing for Vice President, North East Asia

Profile of Member Standing for Vice President, North East Asia

Dong Yu-Hui

Chinese Academy of Sciences, China



Prof. Dong Yu-Hui is the Director of the Multidisciplinary Research Centre, Institute of High Energy Physics, Chinese Academy of Sciences.

He is executive member of the Biophysics Society of China, and

the director of the Photobiology Committee.

He is also member of Chinese Crystallography Society and Macro-molecular Crystallography committee.

In 1990, he obtained a B.S. in Physics in Sun Yat-Sen University (Zhongshan University), Guangzhou, China. He obtained a Ph.D. in Physics in Beijing Synchrotron Radiation Facility, Institute of High Energy Physics, Chinese Academy of Sciences, Beijing, China, in 1995. During 1995-2000, he was Post-doctoral Research Associate at Institute of Physics, Chinese Academy of Sciences, Beijing, China and University of Trento, Italy.

In 2001 he became Professor of condensed matter physics in Institute of High Energy Physics, Chinese Academy of Sciences. Teaching activities have included lectures in MSc and PhD courses and supervising of MSc and PhD theses.

His research activities focus on the methodological research in structure determination of proteins and protein complexes

based on synchrotron radiation. The main research fields are:

- The structure-function relationship of proteins and protein complexes by synergic method on synchrotron radiation, e.g., protein crystallography, SAXS, SR-CD;
- Methods in structure determination of proteins;
- The structures and functions of proteins involved in DNA repair and metabolism.

Professor Dong has authored/co-authored: 3 chapters in books written by teams; about 120 scientific papers in journals and conferences. He is a reviewer for *Scientific Report*, *Acta Crystallographica Section A: Foundations of Crystallography*, *Acta Crystallographica Section D: Biological Crystallography*, *Acta Crystallographica Section F: Structural Biology and Crystallization Communications*, *Journal of Applied Crystallography*, *Journal of Physical Chemistry*, *Journal: Physica B*, *Solid State Sciences*, *Chinese Physics Letters*; also for proposals applied to National Natural Science Foundation of China; National Basic Research Program of China (973 Program), Ministry of Science and Technology; ECHO Grants - Chemistry in Relation to Biological and Medical Sciences, Netherland.

He is the Co-organizer of "Lecture Course on Structural and Biophysical Methods for Biological Macromolecules in Solution" (Sponsored by European Molecular Biology Organization), Beijing Synchrotron Radiation Facility, Beijing, April 28- May 5, 2011.

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.../Profile of Member standing for Vice President, Africa and Middle East

Mohamad A.M. Goma

Atomic Energy Authority, Cairo



B Sc. Physics. Alexandria University

Ph D Radiation Physics, Middlesex hospital Medical School ,
London University, 1968

Current positions :

Radiation Protections Expert and Consultant and
Emeritus Professor of Radiation Physics,
Atomic Energy Authority, Cairo, Egypt.

Radiation Protection Expert, Egyptian Ministry of Health,
from 1980.

Consultant, Radiation Protection Expert and nuclear Safety,
Egyptian Syndicate of Scientific Profession, 2004

Previous Positions :

Vice President of Egyptian Atomic Energy Authority (EAEA) for training and international
cooperation, 1999-200

Chairman Nuclear Research Center, EAEA,1997

Chairman Atomic Reactors Division, EAEA,1995

Head of Radiation Protection Department,EAEA,1983-1995

Head of Physics Dept., College of Education, King Saud University, Abha Branch, Saudi Arabia,
1984-1988

Assistant Prof, College of Science, Phys Dept, Basrah University , Iraq, 1975-1979

Lecturer, from 1969 till 1975 at Radiation Protection Dept at Atomic Energy Authority of Egypt

Demonstrator from 1962-1969 at Radiation Protection Dept at Atomic Energy Authority of Egypt.

Fellowship at London university for PhD studies in Radiation Shielding, from 1964-1968

International and National Representations :

- Egypt representative at World Health Organization, Global Initiative in Radiation Safety of Health
Care settings, Geneva, Switzerland, from Dec 2008
- WHO Expert at International Health Regulations, Rabat, Morocco, 2012
- Vice President of International Radiation Physics Society for Africa and Middle East, from
2009 to 2015
- Conference Scientific Secretary of the Radiation Physics and Protection Conferences, from 1992
Atomic Energy Authority, Cairo, Egypt www.rphysp.com
- Conference scientific secretary of AFROG-II, Cairo, Egypt , 2002
- Egyptian coordinator of AFRA Medical Physics Project, 2001 till 2005.
- Egypt representative at Arab Atomic Energy Authority Activity Planning Meeting, Tunis, Oct 2008.

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- IRPA- Egypt President, from 1992, www.irpa-egypt.com
- Egypt representative to 12th International Radiation Protection Association (IRPA), Argentina, 2008
- Egyptian Representative at United Nations Committee of the Effects of Atomic Radiation UNSCEAR from 2001. Rapporteur of UNSCEAR from 2008-2012
- Egyptian Representative at International Atomic Energy Agency (IAEA), Technical committee Meeting dealing with Upgrading International Basic Safety Standards for protection against Ionizing radiation, Vienna, July 2007
- Congress Scientific Secretary of the second all African IRPA regional radiation Protection Congress, April 2007 and Radiation protection workshop March 2010
- Egyptian Representative of IAEA Technical cooperation meeting dealing with radiation occupational exposure, Cairo, 2007

Scientific Societies Memberships

- Health Physics Society, USA
- American Nuclear Society, USA.
- International Radiation Physics Society,
- CPhys, MInstP at the British Institute of Physics, U K
- CRadP, MSRP, Society for Radiological Protection , U K
- International Radiation Protection Association (IRPA)
- Egyptian Society of Nuclear Sciences and Applications
- Egyptian Society of Radiation Sciences and Applications
- Egyptian Nuclear Physics Association
- Egyptian Society of Medical Physics
- Egyptian Society of Pure and Applied Biophysics
- Egyptian Society for Nuclear Medicine Specialists
- Supervisor of Radiation Protection Consultation and Services Project , EAEA, Cairo Radiation Protection Expert at several Egyptian radiation facilities.

Awards

- National Physics Award, 1976, Egypt
- National Environmental Research Award, 1992, Egypt
- EAEA Scientific Excellence Award, 1995
- EAEA Scientific Recognitions Award, 2011

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.../Profile of Member standing for Vice President, Australia and Oceania

Profile of Member Standing for Vice President, Australasia and Oceania

James Tickner

Chrysos Corporation, Australia



James Tickner is Chief Technology Officer and Founder at Chrysos Corporation, a start-up company developing industrial photonuclear technology for analysis of gold and other elements for mining applications.

Previously, he worked for 18 years at the Commonwealth Scientific and Industrial Research Organisation (CSIRO), leading a team of researchers and engineers developing radiation-based instruments for challenging measurement and image problems in the

minerals and security industries. Technologies developed and commercialised by his group include on-stream XRF and XRD systems, on-belt neutron-gamma analysers, a dual fast-neutron/X-ray radiography Air Cargo Scanner and the PhotonAssay technology being commercialised by Chrysos.

Significant awards during this period include the Eureka Prize for Science in Support of Defence or National Security, the Australian Academy of Science Frederick White Prize, and two CSIRO medals. A passionate advocate for early career researchers, James helped found the Global Young Academy which runs projects around the world with members from 60 countries, and the Australian Early-Mid Career Researcher's Forum.

James has a degree in physics and a D.Phil in particle physics from Oxford University. He has authored more than 110 papers, articles and patents in the fields of particle physics, nuclear instrumentation and Monte Carlo simulation.

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.../Profile of Member standing for Vice President, IRMMA/Industrial Applications

Profile of Member Standing for Vice President, IRMMA / Industrial Applications

John Mattingly

North Carolina State University, U.S.A.



Dr. John Mattingly is an Associate Professor of Nuclear Engineering at North Carolina State University (NCSU), where he has worked since 2011. At NCSU, John directs a team of about ten PhD students and post-

docs developing radiation detection measurement systems and analyses primarily focused on the identification and characterization of special nuclear material (SNM) for nuclear nonproliferation, counterterrorism, and emergency response.

John's team works together with several US national laboratories developing (1) organic scintillator-based measurement systems for fast neutron time-correlation and imaging, (2) radiation detector networks to detect and locate radiation sources in urban environments, and (3) gamma spectroscopic forensic analyses of nuclear fallout. The primary, consistent theme of the team's research is the application of model-based inverse analysis of radiation measurements.

Prior to joining the NCSU faculty, John worked at Sandia National Laboratories from 2003 to 2011 and Oak Ridge National Laboratory from 1997 to 2003. At Sandia, he was a lead developer of GADRAS, which is used by numerous U.S. and international nuclear emergency responders to identify radioactive materials. He also served as an analyst for the US Department of

Energy Triage and Department of Homeland Security Reachback systems, and he participated in several international emergency response exercises. At Oak Ridge, John was a member of the team that developed the Blend-Down Monitoring System, which was deployed to Russia to monitor the down-blending of Russian highly-enriched uranium for the US-Russia HEU Purchase Agreement. He also led the team responsible for performing active neutron interrogation measurements to confirm the Y-12 inventory of nuclear weapons components, and he participated in the warhead measurements campaign in Pantex in 1997. Between his work at Sandia and Oak Ridge, John performed hundreds of active and passive neutron and gamma measurements of nuclear weapons components, fully assembled nuclear weapons, and other fissile assemblies in facilities throughout the US nuclear weapons complex and other facilities in the UK, France, and Russia.

John is also a member of the executive board of the Triangle Institute for Security Studies (TISS) and the executive board of the American Nuclear Society (ANS) Nuclear Nonproliferation Division. In addition to IRPS and ANS, John is also a member of the IEEE and Institute for Nuclear Materials Management (INMM). John is the Chief Scientist of the National Nuclear Security Administration's (NNSA's) Consortium for Nonproliferation Enabling Capabilities (CNEC), where he directs and coordinates the research of professors and students at

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seven nationally-ranked US universities and scientists at four US national laboratories, all of whom are developing new technologies

and policies to support the next-generation of nuclear proliferation detection and deterrence capabilities.

Statement: I am a relatively new member of IRPS; I had the privilege of working with the society as the Program Chair of the Industrial Radioisotope and Radiation Measurement Applications (IRRMA) this summer in Chicago. I was extremely impressed by the global extent of the collaboration on radiation physics by the IRPS membership. If I am elected to serve as the vice president (VP) representing IRMMA/Industrial Applications, I will work with the other VPs and the rest of the IRPS council to maintain the high quality of the society's international meetings and publications, and I will strive to expand the membership by attracting new members from US universities and national laboratories.

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.../Profile of Member standing for Membership Officer

Eric Shirley

National Institute of Standards and Technology, U.S.A.



Staff member, physicist, at the National Institute of Standards and Technology in Gaithersburg, Maryland, USA.

PhD in Physics, University of Illinois at Urbana, Champaign, 1991.

By training, Eric Shirley is a theoretical solid-state physicist, with experience in atomic-structure calculations, band-structure calculations, and many-body theory. He has been involved in calculations of the optical spectra of solids throughout the electromagnetic spectrum, from the far-infrared to the hard x-ray region.

His research interests lie in computational physics, which relies heavily on the use of extensive computational resources, as well as mathematical physics, which is limited only by the abilities of the practitioner. Beyond studying the main moving parts of solids, i.e., electrons, having a background in mathematical physics (of the applied, down-to-earth sort) has helped Shirley and his colleagues study the wave propagation of photons in photonic crystals and practical optical systems such as collimators, radiometers, and telescopes. These research

endeavors have led to successful understanding of problems pertinent to communities ranging from semiconductor manufacturing to astronomy.

Recently, Shirley has also studied generation of synchrotron radiation, going beyond the conventional Schwinger formula, which is only approximate, and is presently considering effects of recoil as a correction to the calculated photon flux. This is in support of NIST's use of a synchrotron as a standard optical source in radiometry.

Shirley is a member of the American Physical Society. He has been actively involved in the Conference on Characterization and Radiometric Calibration from Remote Sensing (CALCON) since 1995, having contributed to short courses and session planning, and during 2001-2013 was on the International Advisory Board and Program Committee of the Vacuum Ultraviolet (VUV) International Conference, which has now merged with the X-ray and Inner-Shell Processes (X) International Conference.

A Hertz Fellow in graduate school, Shirley began his postdoctoral research as a Miller Fellow at the University of California at Berkeley. He has also been honored with the Presidential Early Career Award for Scientists and Engineers (1999), the Sigma Xi Award Young Researcher Award (2002), Fellowship of the American Physical Society (2006), and the Arthur S. Flemming Award in the area of Basic Science (2008). He is also a co-recipient of Department of Commerce Silver Medal (2002), Bronze Medal (2005), and Gold Medal (2013) awards.

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.../Profile of Member standing for Executive Councillor

Richard Hugtenburg

Swansea University, U.K.



Richard Hugtenburg is an Associate Professor of Medical Physics at Swansea University, and a clinical scientist, specialising in radiotherapy physics at Singleton Hospital, Abertawe Bro Morgannwg University Health Board. His research interests include the modelling and use of high spatial and temporal resolution solid-state dosimetry systems in emergent radiotherapy practice, including intensity modulated radiotherapy (IMRT), proton and microbeam radiotherapy.

Dr. Hugtenburg began his career in Christchurch, New Zealand, working as a medical physicist and studying for a PhD that focussed on the use of Monte Carlo and other computational methods in radiotherapy treatment design. Richard moved to the UK in 1997 and continues to practice in radiotherapy physics; first at the Queen Elizabeth Medical Centre in Birmingham, then in Swansea, where he has coordinated a MSc programme in Medical Physics since 2008

Dr. Hugtenburg has developed Monte Carlo modelling of radiation processes in solid-state detector systems and on cellular length-scales, and combines this with an interest in the structural analysis of tissue on the micron-scale, including the use of emergent MRI imaging modalities achieving micron resolution. He is currently exploring the use of such modelling and imaging techniques to improve dosimetric precision of radiotherapy techniques that exploit the uptake of dose-enhancing materials, and in particle therapies.

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.../Profile of Member standing for Executive Councillor

Profile of Member Standing for Executive Councillor

Zdravko Siketić

Ruder Boskovic Institute, Croatia



Zdravko Siketić finished his postgraduate study in 2010 in nuclear physics at the University of Zagreb, Croatia. At the moment he is employed at the Ruder Boskovic Institute (RBI), Zagreb, Croatia as Research Associate in the Laboratory for Ion Beam Interactions (LIBI).

His main activities are related to characterisation and modification of various samples using MeV ion beams (ERDA, RBS, PIXE, SIMS) and also studying the basic parameters of interaction of charged particles with materials. Also, he constructed and designed a new beam line for the thin film analysis TOF-ERDA at RBI, position sensitive MCP detector, gas ionisation detector (GID) and MeV TOF-SIMS spectrometer. Another MeV TOF-SIMS he constructed during his one year of postdoc research at Jozef Stefan Institute in Ljubljana, Slovenia.

In parallel with his experimental work, he participated in many bilateral projects, IAEA CRP-s, European FP7 project SPIRIT and CERIC. From 2007 to 2010 he managed IAEA CRP F11013 and from 2013-2015 he was chief scientific investigator at Croatian-Slovenian bilateral project. At the moment, he is managing IAEA CRP project F11019, Croatian-Austrian bilateral project, and he is MC member of COST Action 16101 "MULTi-modal imaging of FOREnsic SciEnce Evidence (MULTI-FORESEE)- tools for Forensic Science". He participated in the organisation of the 5 international conferences, and he is chairing the next European Conference on Accelerators in Applied Research and Technology (ECAART13) which will be held in Split, Croatia, in 2019.

According to the Current Contents data base and Web of Science he is co-author and author of 58 scientific papers (average number of citations is 4.93, h index is 8). In addition, he is author of the chapter "Ion Beam Analytical Methods" in the book "Nuclear Physics for Cultural Heritage" (Nuclear Physics Division of the European Physical Society, October 2016).

Also, he contributed to over 20 International Conferences with Oral and Poster presentations (5 invited talks). As a part of scientific work, he is refereeing for Nuclear Instruments and Methods B and AIP Conference Proceedings.

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.../Profile of Member standing for Executive Councillor

Pedro Vaz

University of Lisbon, Portugal



Pedro Vaz, Ph.D. in Physics, is Principal Researcher with Habilitation at IST (Instituto Superior Técnico, the leading Portuguese School of Engineering, Science and Technology, at the University of Lisbon). His main areas of research

include Radiation Protection, Shielding, Dosimetry and Nuclear Technology.

He is currently President of the Center for Nuclear Sciences and Technologies (C²TN) of IST and Coordinator of the Radiological Protection and Safety Group at IST.

He serves as the National Liaison Officer (NLO) of Portugal for the International Atomic Energy Agency (IAEA), since July 2017.

He has participated in several European projects in the fields of transmutation of nuclear waste, radiological and nuclear emergencies, radiation protection and dosimetry, medical applications of ionizing radiation and education and training in radiological protection.

He has been Administrator at the Nuclear Energy Agency (NEA) of the OECD, at the computer programs service of the data bank. During that time he has acquired extensive experience in Monte Carlo, deterministic and hybrid computational methods and nuclear data, in support of peaceful applications of nuclear energy and nuclear technology and served as Scientific Secretary of international expert groups such as SATIF (Shielding of Accelerators, Targets and Irradiation Facilities).

He participates in international scientific consortia collaborations at CERN, Geneva, Switzerland, undertaking nuclear data experiments and performing radiation protection, radiation safety, dosimetry and shielding assessment of nuclear technology facilities.

Pedro Vaz is/has been Portuguese representative on the boards in several high-level Technical Committees of the European Union (namely the Group of Experts in Radiological Protection of the EURATOM Treaty and the Consultative Committee on Energy Fission of the European Union) and of the OECD Nuclear Energy Agency (Steering Committee for Nuclear Energy, Nuclear Science Committee, Committee on Radiological Protection and Public Health).

He is the Portuguese or institutional representative in the Boards of different European Union Technology Platforms such as MELODI (Multidisciplinary European Low Dose Initiative) and EURADOS (European Radiation Dosimetry Group).

He is a member of the American Nuclear Society (ANS) and has served as member of the Executive Committee of the Radiation Protection and Shielding Division (RPSD/ANS) and as vice-Chair of the Computational Medical Physics Working Group (CMPWG).

He is author/co-author of approximately 350 articles published in international journals with peer reviewing and in Conference Proceedings. Is a member of the Editorial Board of the journal European Journal of Radiology (EJR, Elsevier), section "Radiation Protection and Physics".

Pedro Vaz teaches Radiation Protection and Dosimetry topics in different Portuguese Universities.

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.../Profile of Member standing for Executive Councillor

Profile of Member Standing for Executive Councillor

Mark Bailey

High Dose Reference Laboratory, Denmark



I joined the High Dose Reference Laboratory (HDRL), Risø, Denmark, in August 2015, and have been providing dosimetry and consulting services for the irradiation industry worldwide since then, as well as having involvement with more fundamental research-based activities in diverse areas from radiotherapy dosimetry to the dating of rocks for archaeology. I have also become an Associate Editor for the journal *Radiation Physics and Chemistry*, an activity which requires time and devotion: finding reviewers for articles is sometimes a challenge!

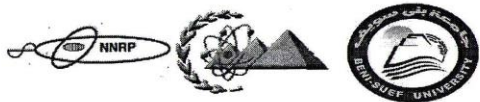
I gained my BSc in physics in 1986, and my PhD in applied nuclear physics in 1990, both from the University of Birmingham, UK. In the mid-1990s I used Monte Carlo calculations to estimate the range of doses that might be

expected to be delivered in a high-energy electron beam facility at the Harwell Laboratory near Oxford in the UK, and then for ten years I was directly involved in the irradiation of medical devices, semiconductors, and gemstones, the calibration of different dosimetry systems, dose mapping for more or less complex product, and giving irradiation advice. I always tried to have fun doing this and maintain an enthusiastic approach, including in my eleven years subsequently at the UK National Physical Laboratory, where my work was much more inclined towards doses at therapy levels.

If I have to admit to a passion, it is in explaining the science via presentations: I try to impart to course attendees for example an idea of how to "think like an electron" - an ability which I am sure is delivered stochastically after carrying out many a Monte Carlo calculation. I have contributed to courses at radiotherapy levels and at high-dose industrial levels, at NPL and HDRL, with the Panel on Gamma and Electron Irradiation (I served a four-year term as Secretary of the Panel, 2006-2010), with the ASTM, and more lately with the IAEA.

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../Conference



NNRP Atomic Energy Authority B S U

Under the Auspices of
Prof Mohamed Shaker
Minister of Electricity and
Renewable Energy

EGYPTIAN ATOMIC ENERGY AUTHORITY
(EAEA)
NATIONAL NETWORK OF RADIATION
PHYSICS — (NNRP)

And

Beni Suf University
(B S U)

invite you to attend
12th RADIATION PHYSICS
&PROTECTION CONFERENCE
(RPCP_12)

25-28 October 2018

The conference shall be
held at conference halls
of Beni Suf University

Conference Honorary Chairmen

Prof. Atef Abdel Fattah Prof.Mansour Hassan

President EAEA President B. S. U.
Prof K Sakr Prof A Marzouk
Vice President EAEA Vice President BSU

Conference chairmen

Prof .Mohamed GOMAA, EAEA, and
Prof .Fayez SHAHIN, BSU

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Correspondence

All correspondence should be via
E-Mail

TO : Prof M. A. M. GOMAA

E mail : mamgomaa@gmail.com
Egyptian Atomic Energy Authority
3 Ahmed El Zomer St., Nasr City
Cairo, Egypt



NNRP Atomic Energy Authority BSU

REGISTRATION FORM
12th Radiation Physics and Protection
Conference
25-28 October 2018
BSU. - Egypt

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Middle Name:

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Expire date

E-Mail:

Type of presentation: Oral Poster

Is Accommodation Requested? Yes/No

Single room Double room

Please contact us for assistance
Please pay registration fees before 15
September 2018

Date: / /

Signature: -----

Conference Venue

Beni Suef city is an important agricultural center which grew from a small village since the turn of the century and now hosts a population of over 150,000. It is famous for its linen manufacturing in the Middle Ages, and continues to be heavily involved in cotton-spinning and carpet making. Located about 75 miles south of Cairo, the Meidum Pyramid is nearby, as is the Fayoum Oasis.

Radiation Physics & Protection Conferences

Since 1992, 11 radiation Physics and protection conferences were held at various Egyptian cities. In 1998, the 8th radiation Physics conference was held in Beni Suef. The 11th Radiation Physics and Protection Conference was held At the Headquarter of E A E A., Cairo.

Conference Publications

Proceedings of 4th to 11th Radiation Physics and Protection Conferences were published in the Arab Journal of Nuclear Sciences and Applications. They published at (www.rphysp.com).

Call for Registration, and Publications

Papers covering original work not published previously are accepted for oral presentation in the conference, registration and abstracts (not more than 250 words on A4 paper) should be submitted on line by 21th June 2018.

The full paper must be sent to email: mamgomaa@gmail.com according to instructions to authors and should be received by 15th September 2018. Only accepted papers will be published in Arab J. of Nucl. Sciences & Applications website and at (www.rphysp.com)

Conference Topics

1. Radiation Sources .
2. Radiation Effects .
3. Radiation Detection and Measurements.
4. Applied Radiation Physics in Industry.
5. Medical Physics & Biophysics
6. Radiation Dosimetry .
7. Earth Sciences, Environmental Radioactivity and NORM .
- 8-Operational Health Physics.
9. Radiation Shielding .
10. Transport of Radioactive Material.
11. Waste Disposal and Waste Residue.
- 12 Nuclear Security .
13. Training and Education.
14. Radiation Protection Regulations & Radiation Control .

Registration Fees

LE 1500 for Egyptians

For Non Egyptians U\$ 600

Fees cover agenda, book of abstracts, mid day meals, visit to historic sites in B S

Registration payment

Registration fees are payable by checks or money transfer to Egyptian Atomic Energy Authority, Scientific Research Fund, 12th Radiation Physics Conference, Cairo, Egypt.

(central bank of Egypt foreign, operation debut treasury system, account no.

4/082/17666/0

Important dates

| | |
|--------------------------|--------------|
| Registration | 15 June 2018 |
| Submission of Abstract | 15 June 2018 |
| Submission of Full paper | 01 Sept 2018 |

For transportation and accommodation,
Please contact conference correspondent

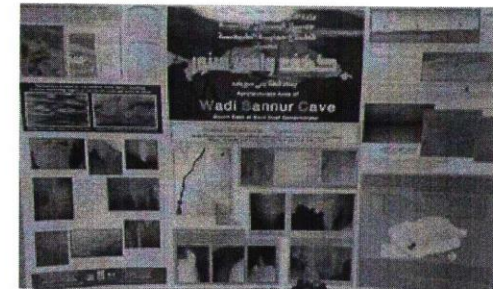


Beni Suef University

B S Museum

The most interesting aspect of Beni Suef is the Museum. The first floor of the museum is devoted to Pharaonic items such as statues, canopic jars and saarcophagi and various Graeco-Roman items. Most of these items came from nearby Abusir and Heracleopolis Magna. The second floor is devoted to Coptic and Muslim items which came from the Egyptian Museum in Cairo.

Sannor Cave, Bani Suef, Egypt

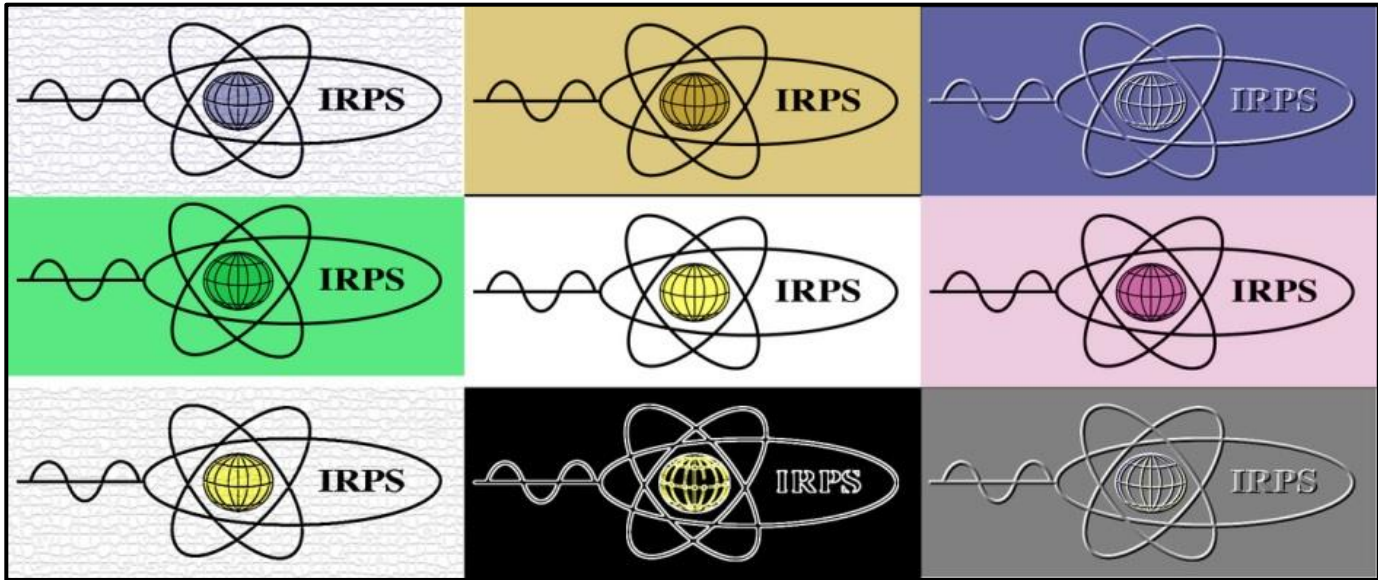


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Membership form for new members, and details for payments by cheque for new and renewing members are on the last 2 pages of this journal and information for payment by credit card is on page
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Elaine Ryan : *email: elaine.ryan@sydney.edu.au*

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Dr William L. Dunn
Department of Mechanical and Nuclear Engineering
Kansas State University
137 F Ward Hall, Manhattan, KS 66506, USA
Phone : 785 532 5628 email : dunn@mne.ksu.edu



INTERNATIONAL RADIATION PHYSICS SOCIETY

The primary objective of the International Radiation Physics Society (IRPS) is to promote the global exchange and integration of scientific information pertaining to the interdisciplinary subject of radiation physics, including the promotion of (i) theoretical and **experimental research in radiation physics**, (ii) investigation of physical aspects of interactions of radiations with living systems, (iii) education in radiation physics, and (iv) utilization of radiations for peaceful purposes.

The Constitution of the IRPS defines Radiation Physics as "the branch of science which deals with the physical aspects of interactions of radiations (both electromagnetic and particulate) with matter." It thus differs in emphasis both from atomic and nuclear

physics and from radiation biology and medicine, instead focusing on the radiations.

The International Radiation Physics Society (IRPS) was founded in 1985 in Ferrara, Italy at the 3rd International Symposium on Radiation Physics (ISRP-3, 1985), following Symposia in Calcutta, India (ISRP-1, 1974) and in Penang, Malaysia (ISRP-2, 1982). Further Symposia have been held in Sao Paulo, Brazil (ISRP-4, 1988), Dubrovnik, Croatia (ISRP-5, 1991) Rabat, Morocco (ISRP-6, 1994), Jaipur, India (ISRP-7, 1997), Prague, Czech Republic (ISRP-8, 2000), Cape Town, South Africa (ISRP-9, 2003), Coimbra, Portugal (ISRP-10, 2006), Australia (ISRP-11, 2009), Rio de Janeiro, Brazil (ISRP-12, 2012) and Beijing, P.R.China (ISRP-13, 2015) The IRPS also sponsors regional Radiation Physics Symposia.

The **IRPS Bulletin** is published quarterly and sent to all IRPS members.

The IRPS Secretariat is : Prof. Jorge E Fernandez (IRPS Secretary),
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The IRPS welcomes your participation in this "global radiation physics family."

INTERNATIONAL RADIATION PHYSICS SOCIETY

Membership Registration Form

1. Name : _____
(First) (Initial) (Last)

2. Date and Place of Birth : _____

3. Business Address : _____

(Post Code) (Country)

Telephone: _____ Email: _____ Fax: _____

4. Current Title or Academic Rank (Please also indicate if Miss, Mrs., or Ms.): _____

5. Field(s) of interest in Radiation Physics (Please attach a list of your publications, if any, in the field):

6. Please list any national or international organization(s) involved in one or more branches of Radiation Physics, of which you are a member, also your status (e.g., student member, member, fellow, emeritus):

../Continued

7. The IRPS has no entrance fee requirement, only triennial (3-year) membership dues. In view of the IRPS unusually low-cost dues, the one-year dues option has been eliminated (by Council action October 1996), commencing January 1, 1997. Also, dues periods will henceforth be by calendar years, to allow annual dues notices. For new members joining prior to July 1 in a given year, their memberships will be considered to be effective January 1 of that year, otherwise January 1 of the following year. For current members, their dues anniversary dates have been similarly shifted to January 1.

Membership dues (stated in US dollars - circle equivalent-amount sent):

| Full Voting Member: 3 years | Student Member: 3 years |
|-----------------------------|----------------------------|
| Developed country \$75.00 | Developed country \$25.00 |
| Developing country \$30.00 | Developing country \$10.00 |

Acceptable modes of IRPS membership dues payment, to start or to continue IRPS membership, are listed below. Please check payment-mode used, enter amount (in currency-type used), and follow instructions in item 8 below. (For currency conversion, please consult newspaper financial pages, at the time of payment). All cheques should be made payable to :

International Radiation Physics Society.

(For payments via credit card - <http://www.irps.net/registration.html>)

[] (in U.S. dollars, drawn on a U.S. bank): Send to Dr W.L. Dunn, Dept. Mechanical and Nuclear Engineering, Kansas State University, 3002 Rathbone Hall, Manhattan, KS, 66506-5205. U.S.A.
 Amount paid (in U.S. dollars) _____

[] (in U.K. pounds): Send to Prof. Malcolm J. Cooper, Physics Dept., University of Warwick, Coventry, CV4 7AL, U.K.. Bank transfer details:
 Account number: 30330701. Bank and Branch code: Barclays, code 20-23-55.
 Eurochecks in U.K. pounds, sent to Prof. Cooper, also acceptable.
 Amount paid (in U.K. pounds) _____

8. Send this Membership Registration Form **AND** a copy of your bank transfer receipt (or copy of your cheque) to the Membership Co-ordinator:

Dr Elaine Ryan
 Department of Radiation Sciences
 University of Sydney
 75 East Street, (P.O. Box 170)
 Lidcombe, N.S.W. 1825, Australia
email: elaine.ryan@sydney.edu.au

9.

_____ *Signature*

_____ *Date*