

International Conference on Radiation Biology (ICRB 2016)

**November 09th, 2016
(Main Auditorium)**

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07.30 -08.45	Registration	Registration	
08.45-08.50	Welcome	Prof. Kantha Deivi Arunachalam (Convener, ICRB 2016)	Welcome Note
08.45-09.00 hrs	Opening Remarks	Dr. Madhu Bala President (I/C) Indian Society for Radiation Biology	Opening Remarks and Declaration of conference Open
Time (Hrs)		Speaker	TITLE
09.00- 09.05	Key Note Address	Mansoor M. Ahmed Division of Cancer Treatment and Diagnosis (DCTD), National Cancer Institute Rockville, MD, USA	Introduction
09.05-10.00	Key Note Speaker Introduction	May Abdel-Wahab Director - Division of Human Health International Atomic Energy Agency, Vienna, Austria	Role of international organization in radiation medicine - an IAEA perspective
10.00-10.50	Plenary Talk	Prof. George Iliakis Institute of Medical Radiation Biology University of Duisburg-Essen, Medical School Germany	Logic and necessities in the choice of repair pathways for the processing of radiation-induced DNA double strand breaks
	Plenary Speaker Introduction	B. S. Dwarakanath Sri Ramachandra University Porur, Chennai, India	
10.50 - 11.10	Tea / Coffee Break		

**Session -1, Main Auditorium
DNA Damage**

	Chairs	Marco Durante Trento Institute for Fundamental Physics and Applications, Trento, Italy	B. S. Dwarakanath Sri Ramachandra University Porur, Chennai, India
Time (Hrs)		Speaker	TITLE
11.10-11.35	Invited Talk	Tej Pandita The Houston Methodist Research Institute, Houston, Texas, USA	Differentiation of human induced pluripotent or embryonic stem cells decreases the DNA damage response
11.35 -12.00	Invited Talk	M. Prakash Hande National University of Singapore, Singapore	Mechanism-based combination therapy in cancer: Telomerase and DNA repair inhibition
12.00 -12.20	Invited Talk	Shrikant Anant University of Kansas Medical Center, Missouri, USA	Effects of Ionizing Radiation on DCLK1 positive Cancer Stem Cells
12.20-12.30	Proffered Presentation	Santhosha Acharya Yenepoya Institute of Technology, Karnataka, India	Assessment of biological response of the human lymphocytes exposed to ultra-short single pulses of energetic electrons
12.30- 12.40	Proffered Presentation	Vishakh R NITTE University, Mangalore, India	Effect of tender coconut water intervention in ameliorating DNA damage induced by electron beam radiation
12.40- 12.50	Proffered Presentation	Vijayalakshmi Subramaniam Vels University, Chennai, India	The Spr 3 like gene of <i>Ashbya gossypii</i> is homologous to CDC 12
12.50-13.00	Proffered Presentation	M Padma Meenakshi Ammal Dental College, Chennai, India	Cytologic changes of oral mucosa by tobacco: Micronucleus assay-an early diagnostic tool to assess genotoxic changes

Session -2, Mini Hall I
Experimental Therapeutics - I

	Chairs	Rheal A Towner Oklahoma Medical Research Foundation Oklahoma City, USA	Sundarapandian SRM Medical College Hospital and Research Centre, SRM University, Chennai, India
Time (Hrs)		Speaker	TITLE
11.10-11.35	Invited Talk	Marc Mendonca Indiana University, School of Medicine, Indianapolis, USA	Enhancing the radiation sensitivity of resistant tumours by alteration of Warburg metabolism
11.35 -12.00	Invited Talk	Hannes Crezee Academisch Medisch Centrum Universiteit van Amsterdam, Netherlands	Quantifying the biological effect of concurrent hyperthermia and radiation to optimise clinical treatment
12.00 -12.20	Invited Talk	Xinhui Wang Harvard medical school Boston, USA	Quick clinical trial by repurposing an old FDA approved and very affordable drug disulfiram
12.20-12.40	Invited Talk	Rajendra Prasad Annamalai University Chidambaram, Tamilnadu, India	Dietary phenolic acids inhibit chronic UVB-induced cellular proliferation through JAK-STAT3 signalling in mouse skin
12.40- 13.00	Invited Talk	R. Bhaskar Sengkang Community and General Hospital, Singapore	Role of DNA repair pathway in cellular radio resistance: a mechanistic study on lung cancer cell repopulation

**Session -3, Mini Hall II
Biodosimetry**

	Chairs	Madhu Bala Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	D. D. Rao Bhabha Atomic Research Centre Mumbai, India
Time (Hrs)		Speaker	TITLE
11.00-11.20	Invited Talk	Nicholas Dainiak Radiation Emergency Assistance Center/ Training Site (REAC/TS) Oak Ridge, TN, USA	Microvesicles, intercellular communication, and radiation biodosimetry
11.20-11.40	Invited Talk	Molykutty J. Aryakalayil National Cancer Institute, Bethesda, USA	Non-Coding RNAs in radiation response
11.40 -12.00	Invited Talk	Solomon F.D. Paul Sri Ramachandra University, Chennai, India	Establishment of gamma-H2AX foci assay as a biomarker to quantify radiation absorbed dose
12.00 -12.20	Invited Talk	P Venkatachalam Professor, Sri Ramachandra University, Chennai, India	Potentials of automated analysis of micronucleus and γ -H2AX foci for radiation triage and dose estimation
12.20-12.40	Invited Talk	R. Ravichandran National Oncology Center, Royal Hospital, Muscat, Oman	Therapy with radioactive 131 Iodine - whole body activity retention measurements and health physics aspects
12.40-12.50	Proffered Presentation	Bincy Babu Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Screening of plasma micro RNAs for biodosimetric assessment of radiation exposure and delineating damage response mechanisms
12.50- 13.00	Proffered Presentation	Shwetanjali Nimker Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Improvising erythropoiesis assays and biomarkers relevant for radiation biodosimetry
13.00-14.30		POSTER SESSION WITH LUNCH BREAK	

**Session -4 (Main Auditorium)
Low Dose: Emerging Concepts**

14.30 - 15.20	Plenary Talk	Christopher H. Clement International Commission on Radiological Protection, Canada	ICRP and Radiation Biology: The role of science in ICRP recommendations
	Plenary Speaker Introduction	Preetha Rajaram Division of cancer Epidemiology and genetics, National Cancer Institute, USA.	
Time (Hrs)		Speaker	TITLE
	Session Chairs	Andrzej Wojcik Stockholm University, Stockholm, Sweden	Preetha Rajaram Division of cancer Epidemiology and genetics, National Cancer Institute, USA.
15.30- 15.55	Invited Talk	Carmel E. Mothersill Canada Research Chair in Radiobiology McMaster University, Hamilton, Canada	Low doses, adaptive responses and bystander effects; where are we now and where should we go?
15.55-16.20	Invited Talk	Rao V. L. Papineni University of Kansas Medical Center, USA & PXI Kanas, USA	Systems Radiopharmacology - Visible Light Imaging of Gut Pathologies Guides Radiation Pharma Discovery
16.20- 16.40	Invited Talk	Sudhir Chandna Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	"The new-found role of Connexin-43 in low-dose radiation hypersensitivity and radiation carcinogenesis"
16.40-17.00	Invited Talk	Colin B. Seymour McMaster University, Hamilton, Canada	Exosomes or UV as candidate bystander signals: A unifying hypothesis
17.00-18.00	Poster Presentation	Poster Presentation with Tea Break	

Session - 5 (Mini Hall - I)
Experimental Therapeutics -II

Time (Hrs)	Chairs	Speaker	TITLE
		Marc Mendonca Indiana University, School of Medicine, Indianapolis, USA	P Venkatachalam Professor, Sri Ramachandra University, Chennai, India
15.30- 15.55	Invited Talk	Rheal A Towner University of Oklahoma Health Sciences Centre, Oklahoma Medical Research Foundation (OMRF), Oklahoma City, OK , USA	Pre-clinical investigations regarding molecular, metabolic and biophysical changes associated with the assessment of anti-glioma therapies
15.55-16.20	Invited Talk	Nicolaas Franken Academic Medical Centre, University of Amsterdam, Netherlands	Targeting DNA double strand break repair with hyperthermia and DNA-PKCS inhibition to enhance the effect of radiation treatment
16.20- 16.45	Invited Talk	Vibha Tandon Special Center for Molecular Medicine Jawaharlal Nehru University New-Delhi, India	Ser/Thr Akt1 kinase activation by a small molecule DMA confers selective radioprotection to intestinal epithelium in xenograft model
16.45-17.00	Invited Talk	Anant Narayan Bhatt Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Metabolic alterations regulate the cellular responses to radiation by facilitating pro-survival signalling and DNA repair

Session – 6, Mini Hall - II
M.R. Raju & Young Scientist Award Presentation

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M.R. Raju Award & Young Scientist
Presentation

17.00-18.00

POSTER SESSION WITH TEA

Day -2
November 10th 2016

09.00- 09.50	Plenary Talk	Vaidya Balendu Prakash Padaav - Specialty Ayurvedic Treatment Center Dehradun, Uttrakhand, India	Ayurvedic approach towards the management of cancer
	Plenary Talk Introduction	K. Ilango Interdisciplinary Institute of Indian System of Medicine, SRM University, Chennai, India	
Session - 7 (Main Auditorium) Ayurveda & Cancer Management			
	Chairs	K. Ilango Interdisciplinary Institute of Indian System of Medicine, SRM University, Chennai, India	Yamini Bhusan Tripathi Institute of Medical Sciences, Banaras Hindu University, Varanasi, India
Time (Hrs)		Speaker	TITLE
10.00-10.25	Invited Talk	Julia T. Arnold NCI -Translational Research Program Bethesda, Maryland, USA	Exploring the potential of Ayurvedic science in current cancer research and treatments
10.25-10.50	Invited Talk	Gaurang J Joshi Atharva Multi Speciality Ayurveda Hospital Rajkot, Gujarat, India.	Management of side-effects of radiotherapy and palliative management through Ayurveda
10.50-11.05	Break	TEA BREAK	

11.05 - 11.30	Invited Talk	Jagadesh Mitti Sri Kalabyraveshwara Swamy Ayurvedic Medical College, Bangalore	Ayurveda in cancer management
11.30- 11.55	Invited Talk	Ramadas Maganti Sri Jayendra Saraswathi Ayurveda College & Hospital, Chennai, India	Potentials of Ayurveda as adjuvant in cancer chemotherapy and radiotherapy side effects reduction
11.55-12.10	Proffered Presentation	Anuradha Maganti Sri Jayendra Saraswathi Ayurveda College & Hospital, Chennai, India	An Ayurvedic hypothetical approach to protect women against reproductive cancers
12.10 - 12.20	Proffered Presentation	R Sarath Chandran Amrita School of Ayurveda Vallikavu, Kerala, India	Management of chemotherapy and radiational side effects through agada and rasayana principles
12.20-12.30	Proffered Presentation	M Sreelekshmi Amrita School of Ayurveda Vallikavu, Kerala, India	Ayurvedic approach in cancer cachexia
12.30- 12.40	Proffered Presentation	U Anjali Amrita School of Ayurveda Vallikavu, Kerala, India	Cancer management through Ayurveda
12.40- 12.50	Proffered Presentation	Nayana Raj Amrita School of Ayurveda Vallikavu, Kerala, India	Traditional Medicine in Cancer Management - An Ayurvedic Approach
12.50-13.00	Proffered Presentation	S Sarath Amrita School of Ayurveda Vallikavu, Kerala, India	Management of cancer through Ayurveda

Session – 8, Mini Hall - I
Natural Background Radiation
(NCI/ICRP sponsored session)

	Chairs	B. Venkatraman Indira Gandhi Centre for Atomic Research, Kalpakkam, Tamil Nadu, India	Christopher H. Clement Scientific Secretary, International Commission on Radiological Protection, Ottawa, Canada
Time (Hrs)		Speaker	TITLE
10.00-10.25	Invited Talk	Quan-Fu Sun National Institute for Radiological Protection, Chinese Center for Disease Control and Prevention, Beijing, China	Overview of studies on high background radiation areas
10.25-10.50	Invited Talk	Richard Wakeford University of Manchester, Manchester, United Kingdom	Studies of cancer risk associated with natural background radiation in Europe
10.50-11.05	TEA BREAK		
11.05 - 11.25	Invited Talk	Birajalaxmi Das Bhabha Atomic Research Centre, Mumbai India	Biological and health effect of low dose and low dose rate natural background radiation on human population in Kerala coast: an overview
11.30- 11.50	Invited Talk	D. D. Rao Bhabha Atomic Research Centre Trombay, Mumbai, India	Assessment of Th-232 ingestion from dietary components by Inhabitants of Thorium rich area in Southern India
11.50-12.10	Invited Talk	P. M. Ravi Health Physics Division, Bhabha Atomic Research	Environmental impact assessment around Indian

		Centre, Mumbai	nuclear power plants
12.10-12.40	Invited Talk	Kantha Deivi Arunachalam Centre for Environmental Nuclear Research, SRM University, Chennai, India	Ingestion dose and health assessment of natural Radionuclides (^{238}U , ^{234}U , ^{226}Ra , ^{210}Po , ^{228}Ra , ^{40}K) to the residents of HBRA by market basket and duplicate diet studies
12.40- 12.50	Proffered Presentation	R Ravisankar Government Arts College, Tiruvannamalai, TN, India	Natural radioactivity and its associated health hazards indices of coastal sediments from Rameswaram island, Tamilnadu, India
12.50- 01.00	Proffered Presentation	A Chandrasekaran SSN college of engineering, Kalavakkam, Tamil Nadu	Measurement of natural radioactivity and the associated radiation hazards in sediments of kovalam, Chennai

Session - 9, Mini Hall - II
Radioprotectors, Mitigators and Normal Tissue Damage - I

Time (Hrs)	Chairs	Speaker	TITLE
		Wolfgang Doerr Medical University Vienna/Vienna General Hospital, Vienna, Austria	V. K. Kalia Department of Neurophysiology, NIMHANS, Bangalore, INDIA
10.00-10.25	Invited Talk	Pataje G.S. Prasanna Radiation Research Program, National Cancer Institute, Bethesda, Maryland, USA	Radioprotectors and mitigators for improving radiotherapy
10.25-10.50	Invited Talk	Madhu Bala Institute of Nuclear Medicine and Allied Sciences, Defence Research and Development Organization (DRDO), New Delhi, India	Radiation protection: understanding the challenges and future directions
10.50-11.05	Tea Break		
11.05 - 11.25	Invited Talk	Naduparambil K Jacob The Ohio State University, Columbus, Ohio, USA	Orientin as a countermeasure against radiation-induced thrombocytopenia
11.25- 11.45	Invited Talk	Suchetha Kumari N K S Hegde Medical Academy, Nitte University, Mangalore, Karnataka INDIA	Diverse role of herbal extracts against radiation toxicity: Current trend and future prospects
11.45-12.05	Invited Talk	Damodar Gupta Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Cellular Models in Screening of Radiation countermeasure agents
12.05- 12.25	Invited Talk	S. S. Lahiri Amity University,	An Approach to Radio-Protection

		NOIDA, India	
12.25-12.40	Proffered Presentation	Kavya Venkateswaran Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Mitigation of radiation-induced hematopoietic injury by the polyphenolic acetate 7, 8-diacetoxy-4-methylthiocoumarin in mice
12.40- 12.50	Proffered Presentation	Sweta Sanguri Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Bio-distribution and scintigraphic studies with ^{99m} Tc-INM-M: A potential radiation countermeasure agent
12.50- 01.00	Proffered Presentation	Shravan Kumar Singh Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Molecular mechanisms of radioprotection offered by radio resistant bacterial metabolite RKIP-006
13.00-13.45	Lunch Break	LUNCH	

13.45- 14.35	Plenary Talk	Marco Durante Trento Institute for Fundamental Physics and Applications, Trento, Italy	Radiation effects on the mission to mars
	Plenary Talk Introduction	Manjit Dosanjh European Organization for Nuclear Research (CERN), Switzerland	

Session - 10, Main Auditorium

High LET Radiobiology

	Chairs	Manjit Dosanjh European Organization for Nuclear Research (CERN), Switzerland	C. K. K. Nair St. Gregorios Dental College & Research Centre, Kothamangalam, Kerala, India.
Time (Hrs)		Speaker	TITLE
14.35 -15.00	Invited Talk	Jeffrey Buchsbaum Radiation Research Program National Cancer Institute, Bethesda, MD, USA	Clinical proton therapy - an introduction to the good and the bad (or when to use it and when to avoid it)
15.00-15.20	Invited Talk	Xiaodong Wu Biophysics Research Institute of America Miami, FL, USA	On biophysical modelling of carbon ion radiation therapy
15.20-15.40	Invited Talk	Premkumar B. Saganti Prairie View A&M University, Prairie View, TX, USA	Heavy ion tracks and space radiobiology: recent experiments with carbon beams at BNL and HIMAC
15.40 - 16.00	Invited Talk	Andrzej Wojcik Stockholm University, Stockholm, Sweden.	DNA damage response to mixed beams of high and low LET radiation

16.00- 16.20	Invited Talk	J. Miszczyk H. Niewodniczanski Institute of Nuclear Physics, Polish Academy of Sciences, Krakow, Poland	Effects of cellular injury by 60 MeV protons and 250 kV X-rays
16.20-16.40	Invited Talk	Adayabalam S Balajee Oak Ridge Institute for Science and Education, Oak Ridge, TN, USA	Effects of radiation quality on structural chromosome aberrations: Influence of 3- dimensional organization of chromosome domains
16.45 - 17.00	Tea Break		
Session - 10 (a), Main Auditorium			
16.45-18.00	ISRB Business Meeting		
18.00-19.00	Cultural Program		
19.00	Dinner		

Session – 11, Mini Hall – I

Population Epidemiology & Environmental Radioactivity

Time (Hrs)	Chairs	Speaker	TITLE
	Chairs	S. Chattopadhyay Bio-Organic Division, Bhabha Atomic Research Centre, Mumbai, India	Anil Kumar Krishna School of Public Health, SRM Medical College Hospital & Research Centre, Chennai, India
14.35-14.55	Invited Talk	Dominique Laurier Institute for Radiation Protection and Nuclear Safety (IRSN), Fontenay aux Roses, France	Results of epidemiological studies among nuclear workers
14.55-15.15	Invited Talk	Michael Hauptmann The Netherlands Cancer Institute, Amsterdam, Netherlands	Review of studies on medical exposures
15.15-15.35	Invited Talk	Tamara Azizova /Anna Denisova Southern Urals Biophysics Institute, Ozyorsk, Chelyabinsk Region, Russia	Radiation and circulatory diseases: review of epidemiological results
15.35 - 15.15	Invited Talk	Richard Wakeford University of Manchester, Manchester, United Kingdom	Effective dose as an indicator of risk
16.00- 16.15	Invited Talk	D. Datta Radiological Physics & Advisory Division Bhabha Atomic Research Centre Mumbai, India	Simulation studies in Population Epidemiology
16.15-16.35	Invited Talk	Anil Kumar Pundir	Estimation of absorbed, annual effective and

		Guru Jambheshwar University of Science and Technology, Hisar, Haryana, India	ambient dose from the environment of Kurukshetra and Ambala districts of northern Haryana, India
16.35 – 16.45	Tea Break		
16.45-17.05	Invited Talk	B. S. Rao Manipal Life Sciences Center, Manipal University, Manipal, Karnataka, India	Radiobiological bases for the revision of dose limits to the eye lens
17.05-17.25	Invited Talk	K.Saraswathi Gopal Meenakshi Ammal Dental College and Hospital, Chennai, India	Oral cancer epidemiology in South Indian based population with series of case presentations
17.25-17.40	Invited Talk	Ayyaru Gopalakrishnan Centre of Advanced Study in Marine Biology, Annamalai University, Parangipettai, Tamil Nadu, India	Prevalence of tumors in fishes of Bay of Bengal

Session - 12, Mani Hall - II
Complex Natural Products in Radiation Response

	Chairs	Julia T. Arnold NCI -Translational Research Program Bethesda, Maryland, USA	R. K. Purohit Radiation Biology Laboratory, Govt. Dungar College, Bikaner, Rajasthan, India
Time (Hrs)		Speaker	TITLE
14.35-14.55	Invited Talk	Ram Manohar Amrita School of Ayurveda Campus, Amrita Vishwa Vidyapeetham University, Kollam, Kerala, India	Ayurvedic interventions for management of cancer: scope and possibilities
14.55-15.15	Invited Talk	Mahadevan Sri Sarada Ayurvedic Clinic Derisanamcope, Kanyakumari, India	Understanding & management of cancer through the principles of guṇasiddhānta of āyurveda
15.15-15.35	Invited Talk	C. K. K. Nair St. Gregorios Dental College & Research Centre, Kothamangalam, Kerala, India.	Mitigation of radiation toxicity by <i>clerodendron</i> <i>infortunatum</i> in mammalian organism
15.35 - 15.55	Invited Talk	Yamini Bhusan Tripathi Institute of Medical Sciences, Banaras Hindu University, Varanasi, India	Scientifically validated herbs having potential to prevent Radiation-induced liver disease
15.55- 16.15	Invited Talk	M. Masroor A. Khan Aligarh Muslim University, Aligarh, India	Depolymerised natural polysaccharides enhance the production of medicinal and aromatic plants and their active constituents
16.15-16.35	Invited Talk	Ganesh Chandra Jagetia School of Life Sciences, Mizoram University, Tanhril, Aizawl, Mizoram, India	Radioprotection by certain plant flavonoids
16.35-16.55	Invited Talk	Bhupinder Singh Nuclear Research Laboratory Indian Agricultural Research Institute (IARI) New Delhi, India	Physiological basis of plant response to ionizing radiation for environmental radiation protection
16.55 - 17.05	Tea Break		

Session – 13, Mini Hall - II
Panel Discussion
Role of Ayurveda in Radiation

	Moderators	Julia T. Arnold NCI -Translational Research Program, Bethesda, Maryland, USA	K. Ilango Interdisciplinary Institute of Indian System of Medicine, SRM University, Kattankulathur, India
17.05-18.00	Invitees	<ol style="list-style-type: none"> 1. Ram Manohar, Amrita School of Ayurveda Campus, Amrita Vishwa Vidyapeetham University, Kollam, Kerala, India 2. Mahadevan, Sri Sarada Ayurvedic Clinic, Derisanamcope, Kanyakumari, India 3. Ganesh Chandra Jagetia, School of Life Sciences, Mizoram University, Tanhril, Aizawl, Mizoram, India 4. Gaurang J Joshi, Atharva Multi Speciality Ayurveda Hospital, Rajkot, Gujarat, India. 5. Jagadesh Mitti, Sri Kalabyraveshwara Swamy Ayurvedic Medical College, Bangalore 6. Ramadas Maganti, Sri Jayendra Saraswathi Ayurveda College & Hospital, Chennai, India 	
18.00 -19.00	Cultural Program		
19.00	Dinner		

Day -3 November 11th, 2016

09.00 - 09.50	Key Note Address	<p style="text-align: center;">Stephen M Hahn The University of Texas MD Anderson Cancer Center, Houston, TX, USA</p>	<p style="text-align: center;">Future of particle therapy: US perspective Introduction:</p>
	Key Note & Plenary Introduction	<p style="text-align: center;">Sunil Krishnan The University of Texas MD Anderson Cancer Center, Houston, TX, USA</p>	
09.50-10.40	Plenary Talk	<p style="text-align: center;">Chandan Guha Albert Einstein College of Medicine Bronx, NY, USA</p>	<p style="text-align: center;">A roadmap to designing the combination trials with radiation therapy& immune therapy</p>
10.40-11.00		Tea Break	
		Session - 14, Main Auditorium Immune Modulation	
	Chairs	<p style="text-align: center;">Stephen M. Hahn The University of Texas MD Anderson Cancer Center, Houston, TX, USA</p>	<p style="text-align: center;">P Venkatachalam Professor, Sri Ramachandra University, Chennai, India</p>
Time (Hrs)		Speaker	TITLE
11.00 - 11.25	Invited Talk	<p style="text-align: center;">Ramesh Rengan Department of Radiation Oncology, University of Washington School of Medicine Seattle, WA, USA</p>	<p style="text-align: center;">Utilization of radiation an immune modulator for cancer therapy in immunocompetent patients</p>
11.25-11.50	Invited Talk	<p style="text-align: center;">Mansoor M. Ahmed Radiation Research Program (RRP), National Cancer Institute,</p>	<p style="text-align: center;">The symbiosis of science of radiation biology with immunology: Impact on basic and</p>

		Rockville, MD, USA	translational research
11.50-12.15	Invited Talk	T. Rajkumar Cancer Institute (WIA), Adyar, Chennai	Dendritic cell vaccine for cervical cancer
12.15-12.40	Invited Talk	Bilikere Dwarakanath Sri Ramachandra University, Chennai, Tamil Nadu, India	Cross talk among different splenic CD4+ cells biases towards Th1 mediated responses during the radio-sensitization of Ehrlich ascites tumor by 2-deoxy-D-glucose in mice
12.40-12.50	Proffered Presentation	Neeraj Kumari Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	IL-6 protects the cells from radiation induced cell death by inducing STAT-3 signaling
12.50-13.00	Proffered Presentation	Aaleya Sanyal Talapatra SRM University, Chennai, Tamil Nadu, India	Effect of SNP variations in vitamin-binding protein on ultraviolet B based immunotherapy for multiple sclerosis
13.00-13.10	Proffered Presentation	Simran Kaur Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	The protective role of immunomodulatory cytokines against lethal dose of radiation <i>in</i> <i>vitro</i> and <i>in vivo</i>
13.10-14.00	Break	Lunch Break	

Session - 15, Mini Hall - I
Topics for the ICRP C1 panel Session
ICRP - C1/IARP (BARC)

Time (Hrs)	Chairs	Speaker	TITLE
		Werner Rühm Helmholtz Zentrum München, German Research Center for Environmental Health, Neuherberg, Germany	Simon Bouffler Public Health England London, United Kingdom
10.00-10.20	Invited Talk	Werner Rühm Helmholtz Zentrum München, German Research Center for Environmental Health, Neuherberg, Germany	Introduction, overview of C1 activities
10.20-10.40	Invited Talk	Margot Tirmarche Institut de Radioprotection et de Sûreté Nucléaire, Fontenay-aux-roses, Cedex, France	Risks associated with alpha emitters
10.40-11.00	Invited Talk	Preetha Rajaram Division of cancer Epidemiology and genetics, National Cancer Institute, USA.	Issues associated to low dose and low dose rates, DDREF
11.00-11.20	Invited Talk	Richard Wakeford The University of Manchester Manchester, England	Effective dose as an indicator of risk
11.20-11.40	Invited Talk	Simon Bouffler Public Health England London, United Kingdom	Stem cell biology with respect to carcinogenesis aspects of radiological protection

Session - 16
PANEL DISCUSSION (ICRP/IARP)
Technical Discussion on Radiation Protection Program

		Session - 16 PANEL DISCUSSION (ICRP/IARP) Technical Discussion on Radiation Protection Program	
	Moderators	B. Venkatraman Vice President - IARP Indira Gandhi Centre for Atomic Research, Kalpakkam, Tamil Nadu, India	Kantha D. Arunachalam Centre for Environmental Nuclear Research, SRM University, Chennai, India
Time		ICRP C1 - Members	IARP Members
11.45-13.10		1. Werner Rühm 2. Simon Bouffler 3. Dominique Laurier 4. Tamara Azizova 5. Wolfgang Dörr 6. Michael Hauptmann 7. Preetha Rajaraman 8. Sisko Salomaa 9. Quanfu Sun 10. Richard Wakeford 11. Andrzej Wojcik 12. Christoper Clement	1. S. Chattopadhyay 2. D. Datta 3. M. S. Kulkarni 4. B. S. Rao 5. P. M. Ravi 6. D. D. Rao 7. R. K. Gopalakrishnan 8. Birajalaxmi Das

Session - 17, Mini Hall - II

Nanotechnology, Physics, and Applications of Radiation

	Chairs		
		Xiaodong Wu Biophysics Research Institute of America Miami, FL, USA	John Thiruvadigal SRM University, Kattankulathur, Chennai, India
Time (Hrs)		Speaker	TITLE
11.00 – 11.25	Invited Talk	Sunil Krishnan The University of Texas MD Anderson Cancer Center, Houston, TX, USA	The current landscape of radiosensitization strategies using gold nanoparticles
11.25-11.50	Invited Talk	B. S. Satish Rao Manipal University, Manipal, Karnataka, India	Targeted delivery of temozolomide against human glioblastoma xenografts using engineered iron nano particles
11.50-12.10	Invited Talk	Tetsuya Konishi Niigata University of Pharmacy and Applied Life Sciences (NUPALS), Japan	Adjuvant role of food factors in chemotherapy
12.10-12.30	Invited Talk	C. Rangacharyulu University of Saskatchewan Saskatoon, SK, Canada	Physical processes of one gray dose photons and protons in water medium and the energy dependent medium modifications
12.30-12.40	Proffered Presentation	Gaganpreet Singh Panjab University, India	Radiobiological modelling and predictions using indigenously designed independent DICOM-RT based software
12.40-12.50	Proffered	Radhaka Madhavanan	Nanomedicines in Siddha -

	Presentation	National Institute of Sidha, Chennai, India	Chandamaruthachenduram - a perspective view
12.50-01.00	Proffered Presentation	Janani Kumar SRM University, Chennai, India	Predicted half-lives of positron emitting radioisotopes
13.00-13.10	Proffered Presentation	Suma Prabhu Manipal University, Manipal, Karnataka, India	Polymeric magnetite nanocomposites of geldanamycin against breast cancer by vanquishing normal cell toxicity
13.10-13.20	Proffered Presentation	B Manjanaik College of fisheries, Kankanady, Mangalore, India	Combined effect of gamma irradiation and frozen storage on the, chemical, microbial quality and shelf life of white leg shrimp (<i>Litopenaeus vannamei</i>)
13.20-14.00	LUNCH BREAK		

14.00-14.50	Plenary Talk	Manjit Dosanjh European Organization for Nuclear Research (CERN), Geneva, Switzerland.	From physics to medical applications
	Plenary Talk Introduction	Marco Durante Trento Institute for Fundamental Physics and Applications, Trento, Italy	
Session - 18 (Main Auditorium) Radiation Physics and Image Guided Radiation Therapy			
	Chairs	Rao V. L. Papineni University of Kansas Medical Center, USA & and PXI Kanas, USA	V.P.R. Siva Kumar College of Physiotherapy, SRM University, Kattankulathur, Chennai, India
Time (Hrs)		Speaker	TITLE
14.50-15.10	Invited Talk	Mathew L. Thakur Thomas Jefferson University Philadelphia, USA	Targeting genomic biomarker, VPAC1 for oncologic imaging
15.10-15.30	Invited Talk	Maria Mathew Dsouza Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	PET/MRI versus PET/CT: reducing the radiation burden
15.30-15.50	Invited Talk	Arun Chougale S.M.S. Medical College & Hospital, Jaipur, India	Radiobiology of particle therapy
15.50-16.10	Invited Talk	Shrikant Patil K.S.Hegde Medical Academy Nitte University, Mangalore, Karnataka, India	Optical coherence tomography - for early detection of oral cancer
16.10-16.30	Invited Talk	Anil Kumar Pandey	Development and verification of a digital

		All India Institute of Medical Sciences, New Delhi, India	image enhancement method for 99mTc-MDP bone imaging
16.30-17.30	Key Note Speaker	C. Norman Coleman Division of Cancer Treatment and Diagnosis (DCTD), National Cancer Institute, USA	The radiation-induced stress response: how can we use radiation dose, fractionation and adaptive response as a “drug” in the era of precision medicine
	Key Note Introduction	Chandan Guha Albert Einstein College of Medicine Bronx, NY, USA	

Session - 19 (Mini Hall-I)
Radioprotectors, Mitigators and Normal Tissue Damage-II

	Chairs	George Iliakis Institute of Medical Radiation Biology University of Duisburg-Essen, Medical School Germany	G. C. Jagetia Mizoram University, Tanhril, Aizawl, India
Time		Speaker	Topic
14.50-15.10	Invited Talk	Wolfgang Doerr Medical University Vienna/Vienna General Hospital, Vienna, Austria	Biology based strategies to modify the normal tissue radiation effects
15.10-15.30	Invited Talk	Radia Tamarat Institut de radioprotection et de sûreté nucléaire Fontenay aux Roses, France.	MSC injection modulates osteocytes number after high one single limb irradiation in a murine model
15.30-15.50	Invited Talk	Shahid Umar University of Kansas Medical Center, Kansas City, USA	Radiation mitigation and intestinal stem cell biology
15.50-16.10	Invited Talk	R. K. Purohit Radiation Biology Laboratory, Govt. Dungar College, Bikaner, Rajasthan, India	Protective influence of natural herbs against radiation and heavy metals induced changes in mice
16.10-16.30	Invited Talk	Raj Kumar Institute of Nuclear Medicine and Allied Sciences, New Delhi, India	Development of radiation countermeasure using radioresistant bacteria: current status and future developments

**SESSION - 20, Mini Hall - II
Proffered Award Presentation**

	Chairs	<p align="center">Dr. Sathish Kumar Interdisciplinary Institute of Indian System of Medicine, SRM University, Kattankulathur, India</p>	<p align="center">Pataje G.S. Prasanna Radiation Research Program, National Cancer Institute, Bethesda, Maryland, USA</p>
Time (Hrs)		Speaker	TITLE
14.50-14.58	Proffered Award Presentation	<p align="center">Pragya Tailor Dibrugarh University, Dibrugarh, Assam, India</p>	Evaluation of anti-microbial and anti-biofilm activities of <i>Syzygium cumini</i> (L.) Skeels mediated gold nanoflowers (Au NFs) against multidrug resistant microbes.
14.58-15.06	Proffered Award Presentation	<p align="center">Shiv varan Singh Indian Veterinary Research Institute, Uttar Pradesh, India</p>	Effect of heavy water (deuterium oxide, D2O) on growth and survival of <i>Gallibacterium anatis</i> biovarhaemolytica.
15.06-15.14	Proffered Award Presentation	<p align="center">K P Sharmila Mangalore University, Mangalore, India</p>	Protective role of <i>Asparagus racemosus</i> root ethanolic extract, isoprinosine and shatavari syrup against electron beam radiation induced cytokine alteration in Swiss albino mice
15.14-15.22	Proffered Award Presentation	<p align="center">P Vivek Vardhan Pondicherry University, Tamil Nadu, India</p>	Gamma-irradiation of commercially important plants enhances the secondary metabolite accumulation
15.22-15.30	Proffered Award Presentation	<p align="center">Priyanka A Shine Amrita School of Ayurveda, Kerala, India</p>	Role of Nutraceuticals in radiation induced damage
15.30-15.38	Proffered Award Presentation	<p align="center">Nilkantha Gupta Center for Environmental Nuclear Research SRM University, Chennai, India</p>	Monitoring the effects of mobile phone radiation on the ear and forehead regions at a different duration time

15.38-15.46	Proffered Award Presentation	Tapas Ranjan Das Indian Agriculture Research Institute, New Delhi, India	Mutagenic effect of gamma-rays on chlorophyll, morphology and genetic variability for yield in greengram [<i>Vigna radiata</i> (L.) Wilczek]
15.46-15.54	Proffered Award Presentation	B. Esther Sathya Bama Karunya University, Coimbatore, Tamil Nadu, India	Anti-mutagenicity of isolated ribosome-inactivating protein from <i>Annona squamosa</i> seeds
15.54-16.02	Proffered Award Presentation	KMA Lakhan North Eastern Hill University Shillong, Meghalaya, India	Radiosensitizing effect of Vicenin-2 on human non-small cell lung cancer cells
16.02-16.10	Proffered Award Presentation	Anuj Kumar Tomer Central University of Rajasthan, Ajmer, Rajasthan, India	Effect of gamma radiation on apparent amylose content of indica rice variety TKM-9 and ADT-37
16.10-16.18	Proffered Award Presentation	Shanmugasundaram Hari Center for Environmental Nuclear Research SRM University, Chennai, India	Dose assessment to residents of Jaduguda, Jharkhand (India) due to natural radionuclides and trace metals
16.18-16.26	Proffered Award Presentation	Raghu Yuvaraj Aarupadai Veedu Institute of Technology, Paiyanoor, Chennai, 603 104, Tamilnadu, India	Natural radioactivity level and radiological hazard assessment of commonly used building material in veraiyur of Tiruvannamalai District, Tamilnadu, India
Main Hall			
17.30-18.30		Valedictory Function & Distribution of Award Certificates	

