

35th Annual Conference of Association of Medical Physicists of India (AMPICON 2014)

Pravara Institute of Medical Sciences, Loni, Maharashtra, India

November 20 - 22, 2014

Scientific Program Schedule

Day I (Thursday), 20 th November 2014 Hall A			Day I (Thursday), 20 th November 2014 Hall B		
Time	Session / Paper	Title	Time	Session / Paper	Title
08.00 - 09.00		Registration			
09.00-10.00	SS-I	Dr. Ramaiah Naidu Memorial Oration - Anil Sharma, USA Chairpersons: M. Ravikumar (President, AMPI) , C. Srinivas (Secretary, AMPI)			
10.00 - 10.30	High Tea				
10.30 - 12.00	SS-II	Proton and Heavy Ion Therapy Chairpersons:			
	I-01	Technological advancement in proton and heavy ion therapy accelerators - P. S. Negi, New Delhi			
	I-02	Clinical aspect of hadron therapy - S. Laskar, Mumbai			
	I-03	Proton therapy commissioning requirements - P. G. G. Kurup, Chennai			
	I-04	Proton Therapy : Clinician's perspective - Bhushan Nemade, Loni			
12.00 - 13.30	SS-III	Small Photon Field Dosimetry Chairpersons:	12.00 -13.15	SS-IV	Mathematical Methods & Imaging dose Chairpersons:
	I-05	Small MV photon field dosimetry: present status - Maria Mania Aspradakis, Switzerland		I-07	Fuzzy set theory in image segmentation - D. Datta, Mumbai
	I-06	Recent development in detector technology for small field dosimetry – D. A. R. Babu, Mumbai		I-08	Imaging dose in RT and patient protection issues - Sudesh Deshpande, Mumbai
	O-01	Derivation of Correction Factors for Small Field Output Factor Measured using Active Detectors and OSLD - Vaibhav Mhatre, R. K. Chaudhary, Shaju P, S. D. Sharma, Dayananda S.		O-04	Mathematical modeling of the impact of magnetic fields in Positron Emission Tomography - R. Vaitheeswaran, Gipson Joe Anto
	O-02	Effect of detector orientation in the determination of small field PDD and profiles with various detectors - Henry Finlay Godson, M. Ravi Kumar, S. Sathiyam, KM Ganesh, Y Retna Ponmalar, C. Varathara		O-05	Dose enhancement in polymer gel dosimeter using gold nano particle for 50 kVp X-ray: An EGSnrc study - Nitin Kakade, S. D. Sharma, Rajesh Kumar, D.A.R. Babu

	O-03	Diamond detector in realizing absorbed dose in high energy linear accelerator photon and electron beams - Ravichandran R, Binukumar J.P., Iqbal Al Amri, Davis C.A.		O-06	Entrance and exit dose measurement in Mammography using Stereotactic Needle Biopsy Phantom - S. Pratheepa, C. S. Selvan, C. S. Sureka, V. Prabhakaran
13.30 - 14.30	Lunch and poster viewing				
14.30 - 15.30	PS-I	Poster Review Presentation Chairpersons:	14.30 - 15.30	PS-II	Poster Discussion Chairpersons:
	PRP-01	Review report on Posters P001-P012:		PD-01 to PD-09	Presenting author of Posters PD-01 to PD-09 will be given 5 minutes time for presentation and discussion of their work
	PRP-02	Review report on Posters P013-P024:			
	PRP-03	Review report on Posters P025-P036:			
	PRP-04	Review report on Posters P037-P048:			
	PRP-05	Review report on Posters P049-P060:			
15.30 - 15.45	Tea				
15.45 - 16.30	SS-V	Plenary Session Chairpersons:			
	I-09	Reaching for the Unreachable in Radiotherapy Technology: A Personal Journey - Clifton Ling, USA			
	I-10	Medical physics: a gateway for interdisciplinary and translation science - Susanta Hui, USA			
16.30 - 17.45	SS-VI	Radiation Protection and Regulatory Aspects Chairpersons:		SS-VII	Radiation Biology and Biological Modelling Chairpersons:
	I-11	Recent developments in national regulatory infrastructure - A. U. Sonawane, Mumbai		I-13	On the accuracy of extrapolation of conventional fractionation based dose volume constraints for hypo or single fraction treatment – Arun Chougule, Jaipur
	I-12	Safety and security of radioactive materials - IG, Security (DAE), Mumbai		I-14	Recent Advances in Biological Modeling (TCP & NTCP) in Radiotherapy - Oinam Arun Singh, Chandigarh
	O-07	Projected Growth of Radiation Facilities and Qualified Radiation Safety Personnel in India - S. Mahalakshmi, G. Sahani, P.K. Dash Sharma, A.U. Sonawane		O-09	Validation of Biological Cost Function based Optimization and its effectiveness over Dose volume based Optimization in Pinnacle TPS for Ca-Esophagus - Amit Nirhali, V. K. Sathiya Narayanan, R.C. Jaon Boss, D. Sekar, S. Basu, V. Maiya, B. Zade
	O-08	Identification of Static and Dynamic exposure of TL dosimeters using CCD imaging technique - Kshama Srivastava, Seepika Soin, Sapra BK		O-10	MeV Electron Beam irradiation faster the fracture healing of Tibia bone of Rabbit - Suvendu K. Sahoo, B. Mallick, I. Nath, R. N. Mukharjee
17.45 - 18.10	I-15	New Generation Truebeam: Highlights - Luis Melo Carvalho, Switzerland			

18.15 - 19.30	Inauguration
19.30 - 22.30	Cultural Programme and Dinner

Day II (Friday), 21st November 2014 Hall A			Day II (Friday), 21st November 2014 Hall B		
Time	Session / Paper	Title	Time	Session / Paper	Title
08.30 - 09.00	CMPE- I	Commissioning of VMAT : Sai Subramanian			
09.00 - 09.30	CMPE- II	Pros & Cons of different patient specific VMAT plan verification methods and tools : Raghvendra Holla			
09.40-11.15	SS-VIII	Image Guidance and Adaptive Radiotherapy Chairpersons:		SS-IX	Sources, Techniques and Dosimetry in Brachytherapy Chairpersons:
	I-16	Transit dosimetry as a tool for dose adaptive radiotherapy - A. Sankar, UK		I-18	HDR brachytherapy of Carcinoma Cervix: Applicability of various dosimetry systems and guidelines in the dose prescription and planning – T. S. Kehwar, USA
	I-17	Challenges in adaptive radiotherapy: Physicist perspective: V. Subramani, New Delhi		I-19	Recent advances in brachytherapy sources, equipment and dosimetry – S. V. Jamema, Mumbai
	O-11	Is re-planning needed during the intensity modulated radiotherapy (IMRT) for head and neck cancer? - S. Sowmya Narayanan, Naveen B, Mahender Damera, Geeta S. Narayanan		O-14	Anatomical based definition of point A for prescribing dose in carcinoma of the cervix intracavitary brachytherapy - Manish K Goyal, T. S. Kehwar, Jayanand, Bret H. Heintz, Jerry L Barker, Kathleen L Shide, D.V. Rai
	O-12	Treatment planning of Pelvic and Head and Neck tumors using Dynamic IMRT: Does the impact of difference in digital and mechanical parameters clinically acceptable? - Habeeb Sidhique, Natraj Ramar, Jerrin Amalraj, Durai Manigandan		O-15	Dosimetry of indigenous developed ¹⁶⁹ Yb brachytherapy seed source - Sridhar Sahoo, T. P. Selvam, S. K. Saxena, A. Dash
	O-13	Comparison of biological indices with dose volume based IMRT plan optimization - K. Senthil Kumar, K.J. Maria Das, A.C. Dekka, K. Balasubramaniam		O-16	Quality Assurance Protocol for IORT facility in the hospitals - N.V.N. Madhusudhana Sresty, Rajib Lochan Sha, A. Mallikarjuna, T. Anil Kumar, Bhudevi Soubagya, A. Krishnam Raju , M. Suneetha, C.K. Naidu
11.15 - 11.30	Tea				
11.30 - 13.00	SS-X	Treatment planning and dosimetry Chairpersons:		SS-XI	Medical Imaging Chairpersons:

	I-20	Development of treatment planning system for VMAT – Roberto Pellegrini, Italy		I-22	Molecular imaging and its applicability in radiotherapy planning – B. K. Malpani, Mumbai
	I-21	Knowledge based treatment planning. Early clinical Experience” - Cozy Luca, Switzerland		I-23	Advances in technology and methods of x-ray imaging systems - Roshan Lavington, Vellore
	O-17	Impact of export on RT structure set between different treatment planning systems: A Statistical Study - Richa Sharma, Kamlesh Passi, Sandhya Sood		O-19	Phase contrast x-ray imaging using a mammography phantom - Reena Sharma, S.D. Sharma, P. S. Sarkar, Amar Sinha, D.A.R Babu.
	O-18	Dosimetric characterization of Gafchromic EBT3 film and validation of an In-house scanner for Gafchromic EBT3 Film Dosimetry - Benedicta Pearlin R, Timothy Peace Balasingh, Paul Ravindran		O-20	Assessment of patient dose for coronary CT Angiography: Feasibility study in Modern Multi Slice CT Scanner - A. Saravanakumar, K. Vaideki, K. N. G. Rajan, S. Jayakumar, B. Devanand.
	---	---		O-21	Excessive radiation exposure to the personnel involved in Diagnostic Radiology/Cardiology - An incident based study - Rajendra R. Shete, Arti Kulkarni, P. K. Dash Sharma
13.00 - 14.00	Lunch and Poster Viewing				
14.00 - 15.15	PS-III	Poster Review Presentation Chairpersons:	14.00 -15.15	TP-I	Trade Presentations Chairpersons:
	PRP-06	Review report on Posters P061-P072			TP-1
	PRP-07	Review report on Posters P073-P084			TP-2
	PRP-08	Review report on Posters P085-P096			TP-3
	PRP-09	Review report on Posters P097-P108			TP-4
	PRP-10	Review report on Posters P109-P121			TP-5
15.15 - 15.30	Tea				
15.30 - 17.00	SS-XII	AMPI Best Oral Paper Session Chairpersons		QZ-I	Quiz Session (for Med Phys students) Quiz Masters:
	O-22	Flattening Filter Free photon beam primary X-ray source spot size modeling in VMAT/IMRT based Stereotactic Radiosurgery: A comparative study using Acuros XB and AAA dose calculation algorithm - M. Kathirvel, V.S Subramanian, G. Arun, S. Thirumalai Swamy, V. Subramani.		G-1	

	O-23	Effect of Inhomogeneity in computational accuracy of various algorithms vis-à-vis Monte Carlo Simulations and Gafchromic film data - Navin Singh, Nirmal Painuly, L. N. Chaudhari, T. Verma, A. Chairmadurai, D. Shrotiya, C.P. Bhatt, M.C. Pant.		G-2	
	O-24	Design and evaluation of a novel in-house developed patient specific quality assurance device for SRS treatments - Nirmal Babu.		G-3	
	O-25	Development and Dosimetric Studies with Stereotactic Radiosurgery (SRS) Cones for use with Bhabhatron-II Telecobalt Machine - R. K. Chaudhary, S. D. Sharma, D. A. R. Babu, D. N. Sharma.		G-4	
	O-26	QA of 4D Computed Tomography using Indigenously Developed Dynamic Phantom - Rajesh Kumar, S. D. Sharma, S. Deshpande, Rituraj Upreti, Nitin Kakade, D. A. R. Babu.		G-5	
	O-27	Electronic Portal Imaging based In Vivo Exit Dosimetry for Vero 4DRT - Timothy Peace Balasingh S, Tomohiro Ono, Paul B Ravindran, Hajime Monzen.		G-6	
17.00 - 17.45	Panel Discussion	Implementation of eLORA has enhanced the efficacy of regulatory affairs Panelists: M. Ravikumar, P. K. Dash Sharma, A. M. Pendse, Raghu Ram Nair, A. K. Rath, L. M. Aggarwal			
17.45 - 18.05	I-24	Innovations in Brachytherapy - Timothy Clark, UK			
18.05 - 19.15	AMPI General Body Meeting including Best of AAPM-2014				
19.30 - 22.00	Dinner				

Day III (Saturday), 22nd November 2014

Time	Session / Paper	Title & Author
08.30 - 09.00	CMPE- III	Clinical and Technical Aspects of Stereotactic Radiosurgery/ Radiotherapy - Sanjay Kumar Raout, Delhi
09.00 - 09.30	CMPE- IV	Motion Management in Advanced Radiotherapy - K. R. Muralidhar, Hyderabad
09.30-11.10	SS-XIII	Dosimetry Audit and Dose Verification
	I-25	Inter-departmental dosimetry audits: the UK experience - David Eaton, UK
	I-26	Patient Dose verification in IMRT and dosimetry audit - S. D. Sharma, Mumbai
	I-27	Quality audit for clinical trials - Rajesh Kinhikar, Mumbai

	O-28	Analysing the performance of multilayer PCB technology based 2D positive ion detector using charged particles in atmospheric condition - C. S. Sureka, P. Venkatraman, K. Mayakannan, R. W. Schulte, V. A. Bashkirov, Ford, CVS Rao
	O-29	Effect of high-spatial resolution detector in patient specific point dose measurement for volumetric modulated arc therapy based stereotactic treatment - S. Thirumalai Swamy, C. Anu Radha, G. Arun, M. Kathirvel, V. Subramanian
11.10 - 11.30	Tea	
11.30 - 13.00	SS-XIV	Paradigm shift in SRS/SBRT Chairpersons:
	I-28	Frame to frameless SRS: Accuracy and pitfall - T. Ganesh, Gurgaon
	I-29	Challenges in the implementation of SBRT - S. Dayananda, Mumbai
	O-30	Frameless stereotaxy: Initial experience at a tertiary care centre using dual imaging environment using six dimensional couch movements - Roy Soumya et. el.
	O-31	A comparative study of plans for irregular targets using Iris and Fixed collimator in Cyberknife Radiosurgery - P. Bhavani et. al.
	O-32	Extensive stereotactic radiosurgery: Preliminary experience with Gamma Knife Perfexion based fractionation - Bisht RK et. al.
13.00 - 13.30	Lunch	
13.30 - 14.45	SS-XV	Advanced Photon Beam Therapy Chairpersons:
	I-30	Latest generation of Tomotherapy: VoLO & TomoEDGE - Nathan Corradini, Switzerland
	I-31	Clinical significance of treatment delivery errors for tomotherapy treatment: a dosimetric simulation study – Shrikant Deshpande, Australia
	O-33	Dosimetric comparison of three dimensional conformal radiotherapy, sliding-window IMRT and Helical Tomotherapy for Lung SBRT - Yogesh G. Ghadi, R. A. Kinthikar, D. D. Deshpande, J. P. Agarwal, S. K. Shrivastava.
	O-34	A Comparative Analysis of Radiation Treatment Planning Systems For Lung SBRT - Kashmiri L Chopra, P. Cecilio, P. Leo, C. Kabat, A. Sethi, T.S. Kehwar, D.V. Rai
14.45 - 16.00	SS-XVI	Hypofractionation and Unflat Photon Beam Therapy Chairpersons:
	I-32	Hypofractionation: biology and clinical practice - V. Kannan, Mumbai
	I-33	Advances and challenges in the implementation of Unflat photon beam - V. K. Sathiya Narayan, Pune
	O-35	Performance Evaluation of C-series LINAC after upgradation with 6 MV FFF beam using AERB Acceptance Test Protocol - R. L. Sha, S. Mahalakshmi, G. Sahani, P. K. Dash Sharma
	O-36	A phantom study on the behavior of Acuros XB Algorithm in FFF photon beams – K. R. Muralidhar et. al.
16.00 - 16.20	Valedictory Function and AMPI Award Distribution	
16.20 - 16.40	High Tea	

List of Poster Discussion (PD) Papers

PD no.	Title and author
PD01	Implementation of IPSA based dose optimisation for HDR Brachytherapy - Satish Pelagade, Harshavardhan Reddy Maddirala, Rahul Misra, U. Suryanarayan, J. P. Neema.
PD02	A dosimetric evaluation of SBRT using RapidArc with FFF mode and FF mode for early prostate cancer - Jegatheeswaran, Ayanbasu, Muruges, Jerrin Amalraj, Rajaram
PD03	Response of CaSO ₄ :Dy based TLD Personnel Monitoring Badge to 106Ru/106Rh beta source - Munish Kumar, R. B. Rakesh, A. K. Bakshi, Ratna P., M. S. Kulkarni, D. A. R. Babu.
PD04	Evaluation of DNA damage with low dose of Co-60 using single-cell gel electrophoresis (comet assay) - M. Siva, T.S. Rajkumar, K. Mayakannan, C. S. Sureka.
PD05	Characterization of 7 MeV Narrow Electron Beam of a Research Accelerator - Ravi Chilkulwar, S.D. Sharma, D. A. R. Babu
PD06	Evaluation of Am-Be neutron source installation using Geant4 Monte Carlo code - C. S. Sureka, Rajnikant Makwana, Francesco Longo, CVS Rao.
PD07	A Study on ion-recombination Effect on High Intensity 6MV FFF beam - K. Ramalingam, S. Senthil Kumar, S. Ashokkumar, K. Karthikeyan, N. Jagadheeskumar, V.S. Subramanian.
PD08	Direct impact analysis of the influence of 6D couch motion and 3D volumetric imaging in LINAC based frameless stereotactic radiosurgery and radiotherapy dose delivery - Sarkar Biplab, Munshi Anusheel, Ray Soumya, Kumar Vijendra, Giri Upendra, Krishnakutty Saneg, Veena BV, Jassal Kanan, Paul Sayan, Roy Shilpi, Jeen SP, T Ganesh, Mohanti BK.
PD09	Development of Infrared Guard to prevent gantry couch collision for Radiation Therapy machine - S. Senthilkumar.

List of Poster Papers

Poster no.	Title and author
P001	Effect of Dose Rate difference on different tumor site and its Fluence Maps in Dynamic IMRT - Vaidya Amod, Jadhav Kuldip, Jadhav Vishal, Pingley Sonali, Shende Shailesh, Kelkar Dhananjay.
P002	Volumetric and dosimetric impact of FDG-PET on CT based IMRT planning for esophageal carcinoma - Anand Jadhav, Gayatri Sahu, Vikas Chodhary, Sharmila Agarwal, B. C. Goswami.
P003	Pretreatment Verification of IMRT Plan: A Comparison with 2D Ion Chamber Array and Portal Dosimetry - Angel Kuriakose, Reshmi Otheyoth, Vennila G, Neethu Singhal.
P004	Evaluation of low dose volumes in pelvic IMRT - Dhamodharan Sekar, V. K. Sathiya Narayanan, Amit Nirhali, R.C. Jaon Boss, P. Sumit Basu, Vikram Maiya, Bhooshan Zade.
P005	Is it necessary to change the default resolution in creating pre-optimization weighted point cloud in IMRT optimization? - Jadhav Kuldip G, Vaidya Amod V, Jadhav Vishal, Pingley Sonali, Shende Shailesh, Kelkar Dhananjay S.
P006	A dosimetric comparison for the larger separation Cervix cancer patients with conventional, 3DCRT and IMRT technique - Kesavan C, Ravindra N, Ramesh V, Anand Rao PB, Siva Shankar K.
P007	Dosimetric impact of flattened and flattening filter free photon beams on RapidArc radiotherapy planning for Cervix Carcinoma - Lalit Kumar, Girigesh Yadav, Kothanda Raman, Manindra Bhushan, Manoj Sharma, Manoj Pal

P008	Dosimetric comparative analysis of Volumetric Intensity-Modulated Arc Therapy and Conventional Intensity Modulated Radiotherapy for all Head and Neck Cancers - Mahender Damera, S. Soumya Narayana, Geeta S Narayanan, Santosh Krishna, Prasanna Kumar V S
P009	Verification of dosimetric accuracy of IMRT delivery - K.Kaviarasu, Misba Hamid, N. Arunai Nambi Raj, K. KrishnaMurthy, L. Sreenivas, A. Ananda Giribabu, PBLD Prasad
P010	Comparison of QA Results of IMRT and VMAT - Renil mon P S, Raghavendra Holla , Rajaneesh Kumar R , Bhaskaran K Pillai.
P011	Accuracy of Verification Plan Creation for Eclipse TPS: Dosimetric Comparison between patient plan fluence & verification plan fluence - Ritesh Mhatre, Shrikant Kale, Yogesh Ghadi, C.M.Tambe, Suresh Chaudhari, Udita Upreti, D.D. Deshpande
P012	A comparative dosimetric study of flattening filter free beams over flattening filter beams in volumetric modulated arc therapy of Head and Neck Carcinomas - S. Maruthu Pandian, S. Karthikeyan, S. Nirmala, J. Mathangi, T. Moorthi
P013	Plan analysis on brain tumor in coplanar with non-coplanar technique in IMRT & verified dosimetric parameters – K.N. Srikanth, Anuradha Rani, Arun Kumar Aggarawal
P014	A comparative study of the segment weight optimization and conventional optimization in CMS XIO for Head and Neck cancers - Soundharyasubbian, Mekala Chandrasekaran.
P015	Effect of Multileaf Collimator width on the quality of Volumetric Modulated Arc Therapy plans: A comparative study - Sruthi K, Bijina T K, Pichandi A
P016	Quality Assurance of Integrated Brachytherapy X-Ray Unit - A. Sivasakthi, Henry Finlay Godson, B. Paul Ravindran, I. Rabi Raja Singh
P017	Dosimetric study of source step size in Co60 HDR brachytherapy - Arvind K Shukla, Sanjeev Kumar, P Sathish Kumar, Narendra K Rathore, Arun S Oinam, Ranjit Singh, IS Sandhu
P018	A comparative study of the rectal inhomogeneity effect in high dose rate brachytherapy Ir192 and Co60source using Gafchromic EBT3 film dosimetry - Avin Kumar, Muthuselvi CA, Pichandi A.
P019	Source calibration, verification, comparison and acceptance of ir-192 HDR afterloading sources supplied over the period of 110 months- a retrospective analysis - N.Balasubramanian, Yogesh Kumar, Anil K Dhull, N.P.Patel, V.Kaushal
P020	High dose rate brachytherapy using cobalt-60 miniature source in carcinoma cervix - P Sathish Kumar, Arvind K Shukla, Narendra K Rathore , Kiran Intodia, Sunnia Gupta, Upendra Nandwana
P021	Use of 2D diode detector array for brachytherapy QA: A feasibility study - Pragathi Shetty, A. Surega, J. Punitha, A.Pichandi, C.A. Muthuselvi
P022	Study of HDR brachytherapy dosimetric parameters using 2D array of ionisation chamber detector - B. Gowri, P.Kaliyappan, A.Gopi, R.Vignesh
P023	Adaptation and documentation of ABS Guidelines of Locally Advanced Carcinoma of Cervix using High Dose Rate Brachytherapy: An Indian Perspective - Ranjitha R , Manoj Kumar M, Anto Vaz S, Senthil Kumar N, Subramaniam R, Madhu Sai Ram R
P024	In-phantom Measurement of Reference Air Kerma Rate of Ir-192 HDR Brachytherapy Source - P.Kaliyappan, B.Gowri, S.Ramesh Krishnan
P025	Quality Assessment of Interstitial Implants in High- Dose- Rate Brachytherapy after Lumpectomy in Patients of Early Stage Breast Cancer - Reena.Ph, Sachin Rasal, Gaurav Jain,Tabassum W, Rajiv Sarin, Lavnya N
P026	Dosimetric evaluation of optimized and unoptimized brachytherapy - Sarath S Nair, Srinidhi G C, Remya, Jyothi
P027	Dose at interfaces of inhomogeneous phantom using different dose calculation algorithms - Naveen Antony, Raghavendra Holla, K. Bhaskaran Pillai, Renilmon P.S.
P028	Evaluation of dose perturbation at the interface of two different density medium using Gafchromic film EBT2 and Monte Carlo code EGSnrc for Co-60 beam - Nirmal Painuly, Navin Singh, Teerthraj Verma, Lalit Narendra chaudhari, Arun Chairmadurai, M.C. Pant

P029	System engineering approach for accurate beam modeling in proton therapy planning - R.Rajagopalan, Murali Balsubramanian, Noorul Sahabudeen
P030	Analyzing the implementation of phase space and variance reduction techniques for 6MV Varian linac using BEAMnrc and DOSXYZnrc Monte Carlo Code - S. Sangeetha, C. S. Sureka
P031	To study the source of secondary photons and electron contamination in equinox-80 beam collimation system by Monte Carlo simulation - Shukla Rahul, Patel Narayan Prasad, Yadav Hanuman Prasad
P032	Measurement of output ratios in air for 6 MV & 15 MV photon beams - Kirti Tyagi, Deboleena Mukherjee, Hari Mukundan, G Singh, P P Gupta
P033	Post-Operative Irradiation Following Immediate Breast Reconstruction Using a Temporary Tissue Expander - Kirti Tyagi, Deboleena Mukherjee, Hari Mukundan, Subhash Ranjan, G Vishwanath
P034	Indigenously developed 6 MV medical linear accelerator Siddharth from installation to patient treatment - Vandana Jain, S. K. Verma, S. S. Siddha, Prakash Shinde, Parthiban V, Muzzamil
P035	Evaluation of 3DCRT plan quality using various indices for cancer of cervix - Jyothi Nagesh, B Ramya, Sarath S. Nair, Srinidhi G C, Donald J Fernandes.
P036	Comparison of step and shoot IMRT base electronic tissue compensation method with standard wedge base tissue compensation in head and neck cancer treatment - Rahul Phansekar, Vipul Patel, Raja S, Hemendra Mod
P037	The Scope and Development of Indigenous Cobalt-60 Teletherapy Sources - S. A Tariq, T. M Ashraf, B. Pintu, D. Paul, K.V.S Sastri
P038	Performance evaluation and quality assurance of Varian Clinac-2100C medical accelerator - P. Kaliyappan, B. Gowri, A. Gopi, B. Vidhya.
P039	Radiological Planning of Radiotherapy Installation - D.P.Pandey, P. Suruliammal, Ezhilarasi R
P040	Portal Imager Performance and Image Quality Optimisation - Mahendra V. More, Srinivas Rao, K. K. Singh
P041	Acceptance Tests of the indigenously developed 6MV SIDDHARTH-III Medical Linear Accelerator - Prakash Shinde, Parthiban, Muzzamil, Vandana Jain, S.K. Verma, S. S. Siddha
P042	VMAT Commissioning and QA of Elekta Infinity digital Linear Accelerator with Agility MLC - Prabhu R, Prabakaran C, Ramakrishna V, Anand Giri Babu A, Vyankatesh S
P043	Acceptance tests for 4 MeV electrons from Clinac IX machines-our experience - R.D. Praveenkumar, P.Sushama, Reshma Bhaskaran , R.Vishnu, K.Janish, P.V Nithin Chandran, T. Ajayakumar
P044	Revised Protocol for Evaluation of Performance Test Criteria of Telecobalt Unit - S. Mahalakshmi, G. Sahani, Pradip kumar , P.K. Dash Sharma, S.D. Sharma, R.L. Sha, Smriti Sharma, Rajesh Kumar, S. Vandana
P045	Dosimetric evaluation of 2D array ion chamber detector for clinical application - P. Kaliyappan, B.Gowri, A.Gopi, S.Suganya
P046	Revised Acceptance test criteria/Quality Assurance tests for Remote afterloading brachytherapy unit - Smriti Sharma, G. Sahani, S. Mahalakshmi, S. Vandana, P. K. Dash Sharma, S. D. Sharma, Rajib L. Sha, Pradip Kumar, Rajesh Kumar
P047	A Study on Effective SSD of Electron Beams in a Linear Accelerator - Deepak U. Pal , Ashitha K, Raghavendra Holla , Bhaskaran K. Pillai, Soumya M
P048	In-vivo dosimetry of breast radiation treatments using optically simulated luminescence dosimeter (OSLD) for electron beams - Sadhana Patel, Raghavendra Holla, Bhaskaran K Pillai
P049	Estimation of electron source position for Elekta Precise Digital Accelerator - Srinidhi G.C, B. Ramya, Jyothi Nagesh, Sarath Nair, Shreekripa, Donald J Fernandes
P050	Evaluation and Comparison of Stereotactic Radiosurgery Treatment Plans of 3mm and 5mm Leaf Width in Eclipse Planning System - A.

	Sivasakthi, Retna John, I. Rabi Raja Singh, B. Paul Ravindran.
P051	IRIS Aperture size analysis using IRIS QA tool with EBT2 Films - Annex E H, Atul Tyagi, Sandeep, Gaganpreet Singh
P052	Dosimetric and Biological study of lung SBRT plans: Quality indices and Biologically Effective doses - Kashmiri L. Chopra, T.S. Kehwar, A. Sethi, D. V. Rai
P053	Commissioning of Circular SRS Cones and its verification with Gafchromic Film dosimetry - A. Ananda Giri Babu, K. M. Ganesh, K.Krishnamurthy, PBLD Prasad, K.Kaviarasu
P054	Study of a change in output Factors on Treatment Planning and on Dose Parameters in Radiosurgery - V P Pandey, Gopishankar N , Sanjay Dixit , Jayant Misra , Rishi K Gupta
P055	Verification of Leksell Gammaknife Perfexion treatment planning system by varying the skull measurement – V. Parthiban.
P056	End-to-End testing for clinical implementation of stereotactic ablative body radiotherapy (SABR) - Vaibhav Mhatre, Shaju P, Dayananda Shamurailatpam
P057	Comparison of MV Conebeam (MVCB) CT and MV Portal Imaging for assessing setup error in Pelvis and Head & Neck site using Rando Phantom - Mamta Mahur, PS Negi, RK Grover, ST Chavan
P058	Assessment of inter-fractional variation in Clinical Target Volume during Radical Radiotherapy for Cervical Cancer - S. Sowmya Narayanan, Abdul Malik, Mahender Damera, Majo V.J., Geeta S Narayanan
P059	Image quality characterization for three image guided radiotherapy (IGRT) systems - Sudesh Deshpande, Sachin Patakar, Suresh Choudhari ,V.Kannan, Deepak Dhote
P060	Reproducibility of shifts in 6-Dimensions using ExacTrac system for patient positioning in radiotherapy - Kumar Vijendra, Giri UK, Sarkar B, Roy S, Jassal K, Guria S, Sayan P, Roy Shilpi, Munshi A, Ganesh T, Mohanti BK
P061	Dose measurements in CR mammography using different breast simulating phantoms - Reena Sharma, S.D. Sharma, S. Pawar, D.A.R Babu, Ajay Chaubey
P062	Accuracy and Precision measurements in Calypso (Body GPS system) and its Quality Assurance - KR Muralidhar, P Srinivas, K Jayaram, Mirza Athar Ali, N Madhusudhan, V Sujana, M Babaiah, Krishna Komanduri
P063	Clinical Implementation of Stereotactic Body Radiotherapy using 4DCT: Its advantages and results - P. Srinivas, K. Jayarama Krishna, Mirza Athar Ali, N. Madhusudhan, V.Srujana, M.Babaiah, KR Muralidhar, Krishna Komanduri
P064	Estimation of radiation dose to the nuclear medicine personnel during administration of 18F-FDG - Pankaj Tandon, Subhash Kheruka, Shashwat Verma, Sanjay Gambhir, A.U. Sonawane
P065	Study on Machine Specific Characteristics of Mammography - C. Senthamil Selvan, C. S. Sureka
P066	Dose verification in carcinoma of uterine cervix patients undergoing 3D conformal radiotherapy with farmer type ion chamber - Challapalli Srinivas, Suman Kumar P, Ramamoorthy Ravichandran, Banerjee S, Saxena PU, Arun Kumar ES, Dinesh Pai K
P067	Evaluation of the PTW 2D Array and Octavius Phantom for IMRT and VMAT Patient Specific Quality Assurance - Prabakaran C, Prabhu R, Ramakrishna V, Vyankatesh S, Manigandan D
P068	Evolution of e-Licensing of Radiation Applications (eLORA) : An approach to complete paperless regulatory process initiated by AERB - Bibekananda Mishra, A. U. Sonawane
P069	Quality assurance in digital radiography using NOMAX Multimeter - C. Senthamil Selvan, C. S. Sureka, R. M. Nehru.
P070	Quality Assurance and Radiation Safety during Commissioning of PET/CT Unit: Our experience - Deboleena Mukherjee, Kirti Tyagi, M. J. Jacob, Dibya Prakash, Abhay Kumar

P071	Calibration of alpha, beta and gamma counting systems - K. Shiyamala, P. Venkatraman, C.S. Sureka
P072	A feasibility study for installation of CyberKnife unit in the existing 6 MV Medical Accelerator room: Radiation Shielding View Point - L. M. Sharma, G. Sahani, P. K. Dixit and P. K. Dash Sharma
P073	Measurement of radiation level due to induced activity in linear accelerator head after delivering 15 MV photon beam - Om Prakash Gurjar, S. D. Sharma
P074	Analysis of charged particle tracking structure - P. Chandrakumar, P. Venkatraman, C. S. Sureka
P075	Analysis on pin diode energy resolution - P. S. Vignesh, P. Venkatraman, C. S. Sureka
P076	A novel technique to measure positive ion drift voltage and energy resolution for arbitrary pressure conditions - P. Venkatraman, C. S. Sureka, R. W. Schulte, V. A. Bashkirov, CVS Rao
P077	MLC Transmission Measurement for Elekta-Infinity Integrated Agility160 leaf with IEC Standard - Prabakaran C, Prabhu R, Ramakrishna V, Vyankatesh S, Manigandan D
P078	Cobalt-60 source loading: necessity of a rigid protocol - Kant R, Dwivedi S, George G, Mahajan MK, Shahid KM, Yadvinder S
P079	Analysis on the performance of pin diode for various low activity sources under different pressure condition - S. Suganthan, P. Venkat Raman, C.S.Sureka
P080	Evaluation of Intensity Modulated Radiotherapy Treatment for Locally advanced Head and Neck Squamous Cell Carcinomas using Empirical Radiobiological Modelling - B. Rekha Reddy, M. Ravikumar, C.R Tanvir Pasha, M.R Anil Kumar , A Pyakuryal , C. Varatharaj, Ganesh Narayanasamy
P081	Investigation of Effects of Radiation Dose Rate and Beam Energy in Cervical Cancer Cell Survival: Study by Clonogenic Assay - Daicy George, K Mahendran, T. S Vijayakumar, Saikat Das, I. Rabi Raja Singh
P082	HU-dose sensitivity and dose response evaluation of N-isopropyl acrylamide normoxic polymer gel dosimeter for radiotherapy dosimetry using X-ray computed tomography - D. N. Singh, I. Sinha, D. K. Ray, P. G. Kumar, Mayuri Jain
P083	Influence of γ – radiation on electrical conductivity of vacuum deposited Tin Oxide thin films - Devesh Gupta, N.K. Srivastava
P084	In Vivo Dosimetry using Optically Stimulated Luminescent Dosimeter - L. Jose Solomon Raj, Rajesh Isaiah, Timothy Peace Balasingh, I. Rabi Raja Singh
P085	Optimization of cathode to anode distance in nanodosimetry - P. Venkatraman, C. S. Sureka, R. W. Schulte, V. A. Bashkirov, CVS Rao.
P086	Analyzing the effects of FXG gel dosimetry for X-Ray Photon and Electron Beams - S. Gokulapriya, K. Srinivasan, S. Sangeetha, K. Mayakannan, C. S. Sureka
P087	Uncertainty analysis of air kerma calibration coefficient of ^{192}Ir brachytherapy reference standard - Sudhir Kumar, D. Datta, S. D. Sharma, D. A. R. Babu, D. N. Sharma
P088	Role of Hybrid Imaging in Oncology – Deboleena Mukherjee, Kirti Tyagi, Hari Mukundan, Subhash Ranjan, M. J. Jacob
P089	Comparison of Different Image Matching Modalities using Cone Beam CT for Head and Neck, Chest and Pelvic Cases - Dilshad Kottuparamban, L Nithya, Manish Bhushan Pandey
P090	Potential of Dual Energy Computer Tomography in Diagnostic Imaging and Radiotherapy - Pratik Kumar, Avinav Bharati, S R Mandal.
P091	Influence of an organic solvent in PAGAT Gel dosimetry: Spectrophotometric analysis - Deena Titus, P. Sathiyaraj, E.J.Samuel, D.S.Kumar
P092	Exploring potential of 3D Print Technology in Radiation Oncology for customized accessories, applicators, phantoms and patient's structures, our initial experience - Deepak Arora, Venkatesan K, Harsh Bhutant, Vineeta Goel, AK Anand, Munjal R K
P093	Study on the statistical nature of radiation counting - M. G. Sivalingam, P. Venkatraman, C. S. Sureka
P094	Verification of electron and photon beam parameters of a high energy linear accelerator with gantry rotation using parallel plate

	chamber - Mary Joan, S.Sathiyaraj, M.Ravikumar, B.Saju
P095	Measurement of effective dose of occupational workers during different Interventional Cardiac procedures - M. Anandan, K. Vaideki , K.N. Govindarajan, A. Saravanakumar
P096	Spectrophotometric study of PAGAT and NIPAM Gel dosimetry - P. Sathiyaraj, T. Deena, E.J.Samuel, K.Srinivassan, D.S.Kumar
P097	Effect of iodine contrast on Polymer Gel dosimetry using X-Ray CT - P.Sathiyaraj, R.Murali, G.Senthil, E.J.Samuel
P098	Reduction in post irradiation X-Ray CT scanning time with green tea extract on polymer gel dosimetry - P. Sathiyaraj, T. Deena, R. Murali, E. J. Samuel, Y. Retna Ponmalar
P099	Mathematical modeling of radioactivity by poisson and gaussian distributions - R. Sasikumar, P. Venkatraman, C. S. Sureka.
P100	Study of Collimator Exchange Effect of Varian Clinac iX - Reshma Bhaskaran, Nithin Chandran P V, Nidhin Keloth Janish K, Sushama P, Praveen Kumar R D, Ajayakumar T
P101	Investigating the impact of transport parameter in Monte Carlo simulation of 6MeV electrons incident on Tantalum plate using EGSnrc Monte Carlo Code - S. Sangeetha, C. S. Sureka
P102	Total Skin Electron Therapy: Retrospective Study Learning from past experience for better future - Ashish Binjola , S. Megha Singh, Seema Sharma, Avinav Bharti, Priyanka Agarwal, Subramani, Subhash Chander, P. K. Julka, Dr. G. K. Rath
P103	Invivo dosimetry for total skin electron therapy (TSET) using optically stimulated luminescence dosimeter (OSLD) - Jafar Ali KV, Raghavendra Holla, Bhaskaran K Pillai, Rajaneesh Kumar
P104	Commissioning of Total Body Irradiation - Raghavendra Holla, Deepa M.V, Rajaneesh Kumar, Soumya M, Renilmon P S, , Manoj Kumar, Bhaskara K Pillai
P105	Experimental verification of Monte Carlo simulations of MLC fields for Cobalt-60 therapy machine - A. Roopa Rani, K. M. Ayyangar, A. R. Reddy, A. Anil Kumar, P. Yadagiri Reddy
P106	Dosimetric evaluation of new advanced composite material as an alternative to carbon fiber table top - S. Senthilkumar
P107	Quantitative comparison of treatment plans using two different planning systems - A. Anil Kumar, P. Krishna Reddy , V. Srinivas, K. Ayyangar , A. Roopa Rani, P.V. Lakshminarayana, A. Durga Prasada Rao
P108	Study on the impact of minimum segment area and minimum segment MU on Parotid dose in Head & Neck cases using Pinnacle Auto-Planning Feature - Gipson Joe Anto, R. Vaitheeswaran, Sudha Balivada, Sivaramakrishnan
P109	A Dosimetric Comparison for the larger separation Cervix cancer patients with Conventional, 3DCRT and IMRT technique - Kesavan C, Ravindra N, Ramesh V, Anand Rao PB, Siva Shankar K.
P110	Intensity Modulated Radiation Therapy: Rapid Dose fall-off and normal tissue sparing in cervical cancer patients - Lalit Chaudhari, Prashantkumar Shinde, Gleetus Timothy, V. Shankar, Rushikumar Panchal, Inderpreet Kaur, Prince Mathew, Tinimol Prince, Akhil Kumar, Ranjan Kumar
P111	Comparison of Dosimetric parameters in Stereotactic treatments of two treatment Planning Systems - P.B.L.D. Prasad, Aparna Y Reddy, Krishna Murthy K, Ram Mohan Reddy, A. Ananda Giri Babu, K. Kaviarasu.
P112	Philips ADAC Pinnacle TPS Planning Comparison of Single and Multi arc VMAT (SmartArc) for Head and Neck Treatments - Prabhu R, Prabakaran C, Ramakrishna V, Anand Giri Babu A, Vyankatesh S.
P113	Equivalent Uniform Dose calculator for the Dose volume constraint (Physical Constraint) based optimization system - R.C. Jaon Bos, V. K. Sathiya Narayanan, Amit Nirhali, Dhamodharan Sekar, Sumit Basu, Vikram Maiya, Bhooshan Zade
P114	Accuracy of RT Structure Set: An Inter-comparison of Four Treatment Planning Systems - Richa Sharma, Kamlesh Passi, P. S. Negi, Sandhya Sood, R. K. Grover, S. T. Chavan

P115	Dosimetric comparison of four Radiotherapy Techniques for Left sided whole Breast irradiation - Shaju P, Vaibhav Mhatre, Pranav Chadha, Dayananda Shamurailatpam.
P116	TPS Evaluation and Dosimetric Comparison of Anisotropic Analytical Algorithm (AAA) and Pencil Beam Convolution (PBC) for Sliding Window (SW) and Multi Static Segmented (MSS) MLC IMRT deliveries to the Carcinoma Esophagus - V Ramesh, N Ravindra, C Kesavan, K Sivashankar, P B Anand Rao.
P117	Technological improvements & Dosimetric analysis of Bhabhatron-II TAW Unit installed at Advanced Cancer Diagnostic Treatment & Research Centre, Punjab - Dwivedi S, Kant R, George G, Mahajan MK, Shahid KM, Yadvinder S
P118	Stereotactic Body Radiation Therapy (SBRT) using flattened and unflat beams in True beam STx Linear Accelerator: a dosimetric study - S. Karthikeyan, S. Maruthu Pandian, S. Nirmala, J. Mathangi, N.K. Venkataramana, T. Moorthi
P119	Comparative study of surface dose and depth of maximum dose on two different linear accelerators - Priyusha Bagdare, Om Prakash Gurjar.
P120	Gantry motion: quality control & assurance-Kant R, Dwivedi S, Mahajan MK, George G, Shahid KM, Yadvinder S
P121	MRI HRCTV in carcinoma cervix in HDR Brachytherapy - V Kannan, S. Deshpande, R.Bajpai, <u>A.Kolse</u> , V Anand, P.Patwe, A Sutar, S.Shinde