

Avinav Bharati

Assistant Professor

Department of Radiation Oncology (Medical Physicist)

Academic Details

Year	Degree	Institute	Board/University
2016	PhD	AIIMS	AIIMS
2011	DRP	BARC, Mumbai	Homi Bhabha National Institute
2010	MSc (Physics)	BHU, Varanasi	Banaras Hindu University
2008	BSc, Physics (H)	JCC College	Calcutta University
2005	10+2	Kendriya Vidyalaya	CBSE
2003	10	GHSS, Rupa	CBSE

Experience

- 1) Worked at Advanced Medicare and Research Institute as Medical Physicist, Radiotherapy since September 2011 to January 2012.
- 2) Worked as Senior Demonstrator, Medical physics, Radiotherapy, AIIMS, New Delhi from February 2012 to July 2015.
- 3) Worked as Medical Physicist at ACDTRC, Radiotherapy, Bhatinda from December 2015 to July 2016.
- 4) Worked as Chief Medical Physicist, Dept. of Radiotherapy, Apex Hospital Varanasi from September 2016 to September 2017.
- 5) Working as Assistant Professor Medical Physics, Dept. of Radiation Oncology, Dr RMLIMS, Lucknow since Sept 2017.

Research Experience: Applications of Dual Energy Computed Tomography for Characterization of Materials.

Softwares

1. Treatment planning systems like **Eclipse, Pinnacle, Oncentra Brachy, Plato, Xio and Monaco**
2. Operating system: Windows, Linux
3. Languages: **Fortran 77 , MATLAB**

Awards and Honours

1. Best poster award at AMPI Conference 2013
2. Mohan Das Pai Best Paper award at AMPINC Conference 2016
3. Best Paper award at UPAROI Conference 2018

Publications

1. **Bharati A**, Mandal SR, Gupta AK, Seth A, Sharma R, Bhalla AS, Das CJ, Chatterjee S, Kumar P. Development of a method to determine electron density and effective atomic number of high atomic number solid materials using dual-energy computed tomography. Journal of Medical Physics. 2019 Jan 1;44(1):49.
2. Mandal SR, **Bharati A**, Haghghi RR, Arava S, Ray R, Jagia P, Sharma S, Chatterjee S, Tabin M, Sharma M, Sharma S. Non-invasive characterization of coronary artery atherosclerotic plaque using dual energy CT: Explanation in ex-vivo samples. Physica Medica. 2018 Jan 1;45:52-8.
3. Mandal SR, **Bharati A**, Kumar Pratik. Determination of mass density of atherosclerotic non calcified plaque. IJAR, 2019 Feb; 9(2).

Patents

Filed a Patent with NRDC vide application no. 201611040826 in name of AIIMS, New Delhi