Curriculum Vitae

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Office:
Dr. Anil Kumar Gourishetty
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Telangana, INDIA.

Working at Dept. of Physics, IIT Roorkee since 3rd January 2011

Also, associated with Centre of Excellence in Disaster Mitigation and Management (CoEDMM), IIT Roorkee since 2014

Research interests:

- Growth and characterization of scintillators (in collaboration with BARC)
- Nuclear Astrophysics (in collaboration with TIFR, Mumbai)
- Studies on intrinsic resolution of scintillators
- Development of GEANT4 codes for understanding response of radiation detectors
- Characterization of radiation detectors for different applications
- Radiation induced effects in materials
- Environmental radioactivity

Research Experience

Sponsored Research Projects

S.No.	Title of Project	Funding Agency	Financial Outlay	Year of start & total period	Name of P.I. and other investigators	Status
1	Studies with new scintillation detectors	DST	21 lakhs	*2012 (3)*	Self ONLY	Completed
2	Studies on coincidence summing effects in scintillation detectors	IIT Roorkee	4.9 lakhs	*2012 (3)*	Self ONLY	Completed
3	Mapping the low temperature and low spin phase diagram of atomic nuclei	DST Indo-Polish	13 lakhs	*2015 (3)*	Dr. Arumugam (P.I.) Self (Co-P.I.) Prof. I. Mazumdar (Co-P.I.)TIFR, Mumbai	In progress

Post Doctoral Fellow at Institute of Nuclear Physics, Krakow, Poland (worked with *Prof. Adam Maj*) (Oct 2009 – July 2010):

- ✓ Detailed GEANT4 simulations of PARIS (Photon Array for studies with Radioactive Ion and Stable beams) array which will be one of the new important detectors for the pan-European facility SPIRAL2, to be located in France.
- ✓ Testing of performance of $LaBr_3$:Ce detectors of different sizes
- ✓ Participation in experiments at Heavy Ion Laboratory, Warsaw, Poland
- ✓ Participated in first AGATA experiment at Legnaro National Laboratory, Italy.

Post Doctoral Fellow at Tata Institute of Fundamental Research, Mumbai, India (worked with *Prof. Indranil Mazumdar*) (May 2007 – Oct 2009):

- ✓ Response of new 4π sum-spin spectrometer consisting of 32 conical NaI(Tl) detectors, 14 NaI(Tl) detectors packed in castle geometry, 7 NaI(Tl) detectors in honeycomb configuration: Experimental measurements and GEANT4 simulations.
- ✓ True coincidence summing correction for large arrays of NaI(Tl) detectors and for a $LaBr_3$(Ce) detector: Experimental measurements and GEANT4 simulations.
- ✓ Experimental studies on a $LaBr_3$(Ce)-NaI(Tl) phoswich detector for X-ray and low energy γ-ray astronomy.
- ✓ Fold to multiplicity calculations for detector arrays in different configurations.
- ✓ Participated in two experiments
  1. Study of giant dipole resonance decay from hot rotating ^{192}Pt.
  2. High spin structure of nuclei with A ~ 130.
- ✓ Augmentation of plastic scintillator for cosmic ray shielding using optical fiber.
- ✓ Participated in extensive testing of NaI(Tl) detectors of different sizes, different shapes and related electronics.

Ph. D. student at Indian Institute of Technology (I. I. T.), Kharagpur (Supervisor: *Prof. S. L. Sharma*) (March 2002 – July 2006):

- ✓ Development of Monte Carlo codes for simulations of response of gas-filled ionization chambers and silicon surface barrier detectors for heavy ions.
- ✓ Computations of ballistic deficits for ionization chamber pulses for CR-RC^n (n=1-6) shaping network, $sine^n$ network, ORTEC 472 spectroscopic amplifier, etc.
- ✓ Experiments with a gas-filled ionization chamber and a silicon surface barrier detector in Nuclear Physics Division, Bhabha Atomic Research Center, Mumbai.
- ✓ Low energy alpha induced fusion reactions with 3 MV Pelletron accelerator at Institute of Physics, Bhubaneswar and the data analysis.
- ✓ Experimental studies on gamma radiation induced effects in structural, electrical, optical properties of TeO_2 thin films for radiation sensor and dosimetric applications.

Education

• **Ph. D.** in Nuclear Physics (March 2002- January 2007) at Indian Institute of Technology, Kharagpur, India Degree awarded in 2008	**Thesis Title:** *"Some studies on important aspects of charged particle spectroscopy with ionization detectors and some aspects of alpha induced fusion reactions with ^{27}Al"* under the supervision of Prof. S. L. Sharma.
• **M. Tech.** in Solid State Technology (Jul. 2000- Jan. 2002) at Indian Institute of Technology, Kharagpur, India	**Project Title:** *"Simulation of detector response for energetic heavy ions"* under the supervision of Prof. S. L. Sharma CGPA: **8.91** (in a scale of **10**)
• **M. Sc.** in Physics (July 1996-July 1998) Kakatiya University, Warangal, Andhra Pradesh, India	Percentage of marks: **75%**
• **B. Sc.** in Mathematics, Physics and Chemistry (July 1993- April 1996) Kakatiya University, Warangal, Andhra Pradesh, India	Percentage of marks: **75%**

Professional Experience

- ✓ Currently working as Assistant Professor in the Department of Physics, Indian Institute of Technology Roorkee, Roorkee since 3rd January 2011.
- ✓ Two years experience (July 1998 – June 2000) as a lecturer in physics at Chaitanya Degree and Post Graduate College, Hanamkonda. I have also conducted laboratory classes for undergraduate students during this period.

Collaborations

1. PARIS collaboration, Europe
2. BARC, Mumbai
3. TIFR, Mumbai

Awards and Honors

- ✓ Shortlisted in top 15 faculty members at institute level for outstanding teacher award, in 2018, based on student feedback score. Best faculty score obtained till now is 4.57/5

Reviewer of journals:

1. IEEE Transactions on Nuclear Science
2. Journal of Applied Physics
3. Nuclear Instruments and Methods in Physics Research–A
4. Journal of Radio analytical and Nuclear Chemistry

Teaching, Guidance and Mentorship

1. Taught EM theory, Special theory of relativity, Nuclear Physics, Modern Physics and Reactor Physics at IIT Roorkee at UG and PG level.
2. Mentored one post doctoral fellow (Dr. Mukesh Prasad) during 2017-18
3. One PhD student (Monalisha Dhibar) has received PhD degree on 10th May 2018. The title of her thesis was "Studies in nuclear structure and big bang nucleosynthesis using proton beams". He co-guide is Prof. Indranil Mazumdar, TIFR.
4. Currently guiding, 4 PhD, 2 M. Tech, 3 M. Sc. and 2 B.Tech. student in their dissertation works.
5. Guided 8 M. Tech. and 10 M.Sc. students in their dissertation works.
6. Mentored 3 students of IIT Kharagpur as part of Alumni mentorship program.

Contributions at Institutional level at IIT Roorkee (since 2011)*:*

- Convener, Institute Lecture Series Committee (January 2014-ongoing). Took lead role in organizing 46 institute lectures.
- Coordinator, Sanskrit club, IIT Roorkee (January 2015- ongoing). Organized 6 guest lectures and 2 workshops.
- Secretary, Indian Physics Association, Roorkee chapter (2011-14 and 2016-ongoing). Organized 16 guest lectures by faculty members and 24 seminars by PhD students.
- Member, ABN school management committee (2015- 2018)
- Member of IPR Chair on Scientific Validation of Traditional Knowledge at IIT Roorkee
- Faculty Advisor, Electronics Section, Hobbies Club (2016-17)
- Program officer, National Service Scheme (2014-15)

Additional Information

- ✓ Secretary, Indian Physics Association (Roorkee Chapter)
- ✓ Member of Institute of Electrical and Electronics Engineers (**IEEE**) during 2004-2017
- ✓ Life member of International Radiation Physics Society (IRPS)
- ✓ Life member of the Indian Physical Society
- ✓ Life member of the Indian Physics Association (LM-12299)
- ✓ Life member of the Indian Nuclear Society
- ✓ Life member of the Materials Research Society of India (L0839)

List of Publications in refereed journals

1. S Mukesh Prasad, **G. Anil Kumar**, S. K. Sahoo, R. C. Ramola, "Health risks associated with the exposure to uranium and heavy metals through potable groundwater in Uttarakhand state of India", Journal of Radioanalytical and Nuclear Chemistry (Accepted, https://doi.org/10.1007/s10967-018-6281-7).
2. M. Narsimhulu, **G. Anil Kumar**, G. Bhargavi, B. Srinivas, K. A. Hussain, "*Synthesis, crystal structure, thermal, photoluminescent and magnetic properties of a new material: Na2[Ni(C2O4)2(H2O)2].6H2O",* Journal of Molecular Structure, 1178 (2019) 155-161.
3. S. Rawat, M. Tyagi, **G. Anil Kumar**, S. C. Gadkari, Efficiency studies on $Gd_3Ga_3Al_2O_{12}$:Ce scintillators: Simulations and measurements", IEEE *Trans. on Nucl. Sci., 65 (2018) 2109-2113.*
4. Mukesh Prasad, **G. Anil Kumar**, B. K. Sahoo, R. C. Ramola, "A comprehensive study of radon levels and associated radiation doses in Himalayan groundwater", *Acta Geophysica*, 2018 (In press, https://link.springer.com/article/10.1007/ s11600-018-0135-0).
5. Mukesh Prasad, Peter Bossew, **G. Anil Kumar**, Rosaline Mishra, R. C. Ramola, "Dose assessment from the exposure to attached and unattached progeny of radon and thoron in indoor environment", *Acta Geophysica*, 2018 (https://doi.org/10.1007/ s11600-018-0111-8).
6. V. Ranga, S. Rawat, Snigdha Sharma, Mukesh Prasad, S. Panwar, K. Thakur, M.Dhibar, **G. Anil Kumar,** "Intrinsic resolution of Compton electrons in $CeBr_3$ scintillator using compact CCT". *IEEE Transactions on Nuclear Science* 65 (January 2018) 616-620.
7. M. Dhibar, I. Mazumdar, P. B. Chavan, S. M. Patel, **G. Anil Kumar**, "Characterization of a 2 × 2 array of large square bars of $LaBr_3$:Ce detectors with gamma-rays up to 22.5 MeV", *Nucl. Instr. and Meth. in Phys. Res. – A* 883 (2018) 183.
8. S. Rawat, Mohit Tyagi, P. K. Netrakanti, V. K. S. Kashyap, A. Mitra, A. K. Singh, D. G. Desai, **G. Anil Kumar**, S. C. Gadkari, "Pulse shape discrimination properties of Gd3Ga3Al2O12:Ce single crystal in comparison with CsI:Tl", *Nucl. Instr. and Meth. in Phys. Res. – A 840 (December 2016) 186-191.*
9. M. Dhibar, D. Mankad, I. Mazumdar, **G. Anil Kumar**, "Efficiency calibration and coincidence summing correction for a large volume (946 cm^3) $LaBr_3$(Ce) detector: GEANT4 simulations and experimental measurements", *Applied Radiation and Isotopes* 118 (December 2016) 32-37.
10. K. Hadyńska-Klęk, P. J. Napiorkowski, M. Zielińska, J. Srebrny, A. Maj, F. Azaiez, J. J. Valiente Dobón, M. Kicińska-Habior, F. Nowacki, H. Naïdja, B. Bounthong, T. R. Rodríguez, G. de Angelis, T. Abraham, **G. Anil Kumar**, D. Bazzacco, M. Bellato, D. Bortolato, P. Bednarczyk, G. Benzoni, L. Berti, B. Birkenbach, B. Bruyneel, S. Brambilla, F. Camera, J. Chavas, B. Cederwall, L. Charles, M. Ciemała, P. Cocconi, P. Coleman-Smith, A. Colombo, A. Corsi, F. C. L. Crespi, D. M. Cullen, A. Czermak, P. Désesquelles, D. T. Doherty, B. Dulny, J. Eberth, E. Farnea, B. Fornal, S. Franchoo, A. Gadea, A. Giaz, A. Gottardo, X. Grave, J. Grębosz, A. Görgen, M. Gulmini, T. Habermann, H. Hess, R. Isocrate, J. Iwanicki, G. Jaworski, D. S. Judson, A. Jungclaus, N. Karkour, M. Kmiecik, D. Karpiński, M. Kisieliński, N. Kondratyev, A. Korichi, M. Komorowska, M. Kowalczyk, W. Korten, M. Krzysiek, G. Lehaut, S. Leoni, J. Ljungvall, A. Lopez-Martens, S. Lunardi, G. Maron, K. Mazurek, R. Menegazzo, D. Mengoni, E. Merchán, W. Męczyński, C. Michelagnoli, J. Mierzejewski, B. Million, S. Myalski, D. R. Napoli, R. Nicolini, M. Niikura, A. Obertelli, S. F. Özmen, M. Palacz, L.

Próchniak, A. Pullia, B. Quintana, G. Rampazzo, F. Recchia, N. Redon, P. Reiter, D. Rosso, K. Rusek, E. Sahin, M.-D. Salsac, P.-A. Söderström, I. Stefan, O. Stézowski, J. Styczeń, Ch. Theisen, N. Toniolo, C. A. Ur, V. Vandone, R. Wadsworth, B. Wasilewska, A. Wiens, J. L. Wood, K. Wrzosek-Lipska, and M. Zięblíński, "Superdeformed and Triaxial States in ^{42}Ca", *Phys. Rev. Lett*., 117 (2016) 062501(1-6).

11. Deepika Choudhury, A. K. Jain, **G. Anil Kumar,** Suresh Kumar, Sukhjeet Singh, P. Singh, M. Sainath, T Trivedi, J. Sethi, S. Saha, S. K. Jadav, B. S. Naidu, R. Palit, H. C. Jain, L. Chaturvedi, and S. C. Pancholi, "Multiple anti-magnetic rotation bands in odd-A ^{107}Cd", *Physical Review C, 87(March 2013) 034304*.
12. I. Mazumdar, D.A. Gothe, **G. Anil Kumar**, N. Yadav, P. B. Chavan, S. M. Patel, "Studying the properties and response of a large volume (946 cm^3) $LaBr_3$:Ce detector with ▪ -rays up to 22.5 MeV", *Nuclear Instruments and Methods in Physics Research – A 705* (March 2013) 85-92.
13. Manisha Mohil, **G. Anil Kumar,** "Gamma Radiation Induced Effects in TeO_2 Thin Films", *Journal of Nano-And Electronic Physics*, Vol. 5, No 2, (May 2013) 02018 (3pp).
14. K. Hadynska-Klek, P.J. Napiorkowski, A. Majc, F. Azaiez, M. Kicinska-Habior, J.J. Valiente-Dobón, G. de Angelis, T. Abraham, G. Anil Kumar, B.-Q. Arnés, D. Bazzacco, M. Bellato, D. Bortolato, P. Bednarczyk, G. Benzoni, L. Berti, B. Birkenbach, B. Bruyneel, S. Brambillai, F. Camera, J. Chavas, M. Ciemała, P. Cocconi, P. Coleman-Smith, A. Colombo, A. Corsii, F.C.L. Crespi, D.M. Cullen, A. Czermak, P. Désesquelles, B. Dulny, J. Eberth, E. Farnea, B. Fornal, S. Franchoo, A. Gadea, A. Giaz, A. Gottardo, X. Grave, J. Grebosz, M. Gulmini, T. Habermann, R. Isocrate, J. Iwanicki, G. Jaworski, A. Jungclaus, N. Karkour, M. Kmiecik, D. Karpinski, M. Kisielinski, N. Kondratyeve, A. Korichi, M. Komorowska, M. Kowalczyk, W. Korten, M. Krzysiek, G. Lehaut, S. Leoni, A. Lopez-Martens, S. Lunardi, G. Maron, K. Mazurek, R. Menegazzo, D. Mengoni, E. Merchán, W. Meczynski, C. Michelagnoli, J. Mierzejewski, B. Million, P. Molini, S. Myalski, D.R. Napoli, R. Nicolini, M. Niikura, A. Obertelli, S.F. Özmen, M. Palacz, A. Pullia, G. Rampazzo, F. Recchia, N. Redon, P. Reiter, D. Rosso, K. Rusek, E. Sahin, M.-D. Salsac, P.-A. Söderström, J. Srebrny, I. Stefan, O. Stézowski, J. Styczen, Ch. Theisen, N. Toniolo, C.A. Ur, V. Vandone, R. Wadsworth, B. Wasilewska, A. Wiens, K. Wrzosek-Lipska, M. Zielinska, M. Zieblinski, "Towards the determination of super deformation in ^{42}Ca*, *Acta Physica Polonica B* 44 (March 2011) 617-625.
15. I. Mazumdar, D.A. Gothe, **G. Anil Kumar**, M. Aggarwal, "Shape transitions and isovector giant quadrupole resonance decay in hot rotating nuclei", *Acta Physica Polonica B* 42 (March 2011) 643-652.
16. K. Hadynska-Klek, P.J. Napiorkowski, A. Maj, F. Azaiez, J.J. Valiente-Dobon, G. de Angelis, **G. Anil Kumar**, D. Bartolato, D. Bazzacco, P. Bednarczyk, M. Bellato, G. Benzoni, L. Berti, B. Bruyneel, F. Camera, M.Ciemala, P.Cocconi, A. Colombo, A. Corsi, F. Crespi, A. Czermak, B. Dulny, E. Farnea, B. Fornal, S.Franchoo, A.Gadea, A. Giaz, A. Gottardo, X. Grave, J.Grebosz, M.Gulmini, H. Hess, R. Isocrate, G.Jaworski, M. Kicinska-Habior, M. Kmiecik, N. Kondratyev, A. Korichi, W. Korten, G. Lehaut, S.Lenzi, S.Leoni, S.Lunardi, G. Maron, R. Menegazzo, D.Mengoni, E.Merchan, W.Me¸czy´nski, C.Miechelagnoli, P.Molini, D. Napoli, R.Nicolini, M. Niikura, M.Palacz, G. Rampazzo, F.Recchia, N. Redon, P.Reiter, D. Rosso, E. Sahin, J.Srebrny, I. Stefan, O. Stezowski, J.Stycze´n, N.Toniolo, C.A. Ur, V. Vandone, B.Wadsworth, A.Wiens, K. Wrzosek-Lipska M.Zieli´nska, M.Zieblinski, "Refinement of ^{42}Ca

level scheme. Preliminary results from the first AGATA demonstrator experiment", *Acta Physica Polonica B* 42 (March 2011) 817-824.

17. I. Mazumdar, **G. Anil Kumar**, D. A. Gothe, R. K. Manchanda, "A $LaBr_3$(Ce)-NaI(Tl) phoswich for X-ray and low energy γ-ray astronomy", *Nuclear Instruments and Methods in Physics Research–A* 623 (November 2010) 995-998.
18. **G. Anil Kumar**, I. Mazumdar and D. A. Gothe, "Efficiency calibration and coincidence summing correction for large arrays of NaI(Tl) detectors in soccer-ball and castle geometries" *Nuclear Instruments and Methods in Physics Research–A* 611 (November 2009) 76-83.
19. **G. Anil Kumar**, I. Mazumdar and D. A. Gothe, "Experiments measurements and GEANT4 simulations for a comparative study of efficiencies of $LaBr_3$, NaI(Tl) and BaF_2**",** *Nuclear Instruments and Methods in Physics Research–A* 610 (November 2009) 522-529.
20. **G. Anil Kumar**, I. Mazumdar and D. A. Gothe, "Efficiency calibration and simulation of a $LaBr_3$(Ce) detector in close-geometry", *Nuclear Instruments and Methods in Physics Research –A* 609 (October 2009) 183-186.
21. I. Mazumdar, D.A. Gothe, **G. Anil Kumar**, M. Aggarwal, P. K. Joshi, R. Palit, H. C. Jain, "Search for rare shape transition and GQR decay in hot rotating ^{188}Os nucleus", *Acta Physica Polonica B* 40 (March 2009) 545-553.
22. A. Maj, F. Azaiez, D. Jenkins, Ch. Schmitt, O. Stezowski, J.P. Wieleczko, D. Balabanski, P. Bednarczyk, S. Brambilla, F. Camera, D.R. Chakrabarty, M. Chelstowska, M. Ciemala, S. Courtine, M. Csatlos, Z. Dombradi, O. Dorvaux, J. Dudek, M.N. Erduran, S. Ertürk, B. Fornal, S. Franchoo, G. Georgiev, J. Gulyás, S. Harissopoulos, P. Joshi, M. Kicińska-Habior, M. Kmiecik, A. Krasznahorkay, **G. Anil Kumar**, Suresh Kumar, M. Labiche, I. Mazumdar, K. Mazurek, W. Męczyński, S. Myalski, V. Nanal, P. Napiorkowski, J. Peyre, J. Pouthas, O. Roberts, M. Rousseau J.A. Scarpac, A. Smith, J. Strachan, D. Watts, M. Zieblinski, "The PARIS project", *Acta Physica Polonica B* 40 (March 2009) 565-575.
23. **G. Anil Kumar**, S. L. Sharma and R. K. Choudhury, "Ballistic deficits for ionization chamber pulses in pulse shaping amplifiers", *IEEE Transactions on Nuclear Science* 54 (April 2007) 333-341.
24. S. L. Sharma, **G. Anil Kumar,** R. K. Choudhury, "Some studies on the pulse-height loss due to capacitive decay in the detector-circuit of parallel plate ionization chambers", *Nuclear Instruments and Methods in Physics Research - A* 566 (October 2006) 540-551.
25. P. Ganguly, J. C. Biswas, S. K. Lahiri, M. L. Nandagoshami, **G. Anil Kumar**, and S. L. Sharma, "Effects of gamma irradiation on erbium indiffused lithium niobate substrate" *Journal of Optics* 34 (2005) 145-152.
26. S. L. Sharma, **G. Anil Kumar** and H. N. Acharya, "Optoelectronic properties of mercuric iodide crystals for radiation detection" *Indian Journal of Pure and Applied Physics* 42 (September 2004) 653-665.

In Conferences/Symposia

1. Efficiency of $CeBr_3$ detector: Simulations and measurements using a positron emitter, S Panwar, V Ranga, ***G. Anil Kumar***, DAE International Symposium on Nuclear Physics (Govt. of India), Vol. 63 (2018) 1198.

2. Study of Compton electrons in $LaBr_3$:Ce using compact CCT, S. S. Kaintura, V. Ranga, S. Panwar, P. Sehgal, ***G. Anil Kumar***, DAE International Symposium on Nuclear Physics (Govt. of India) Vol. 63 (2018) 1082.
3. Studies on angular correlation of gamma rays using GEANT4, V. Mendiratta, V. Ranga, S. Panwar, ***G. Anil Kumar***, DAE International Symposium on Nuclear Physics (Govt. of India), Vol. 63 (2018) 1154.
4. Growth and scintillation properties of Tl doped LiI single crystal: A fast thermal neutron scintillator, Kalyani, S. Rawat, Awadh K. Singh, ***G. Anil Kumar***, Mohit Tyagi, DAE International Symposium on Nuclear Physics (Govt. of India), Vol. 63 (2018) 1132.
5. An improvement of the pulse shape discrimination properties of $Gd_3Ga_3Al_2O_{12}$:Ce single crystal scintillator, S. Rawat, Mohit Tyagi, ***G. Anil Kumar***, DAE International Symposium on Nuclear Physics (Govt. of India), Vol. 63 (2018) 1130.
6. Gamma ray spectrometric analysis of natural radionuclides in soil of Uttarakhand, India, *Mukesh Prasad,* ***G. Anil Kumar****, R. C. Ramola,* presented in 6th International Geo-hazards Research Symposium held during 4-9 March, 2018 in Dresden, Germany.
7. Radiological and chemical risk assessment from the exposure to uranium and heavy metals in drinking water, *Mukesh Prasad,* ***G. Anil Kumar****, R. C. Ramola,* presented in 6th International Geo-hazards Research Symposium held during 4-9 March, 2018 in Dresden, Germany.
8. Analysis of natural radionuclides in soil using High Purity Germanium detector based Gamma Ray Spectrometry, *Mukesh Prasad, V. Ranga,* ***G. Anil Kumar****, R. C. Ramola*, presented in International Conference (IARPIC-2018) on "Developments towards Improvements of Radiological Surveillance at Nuclear Facilities and Environment" held during 16-20 January, 2018 at BARC, Mumbai.
9. Studies on effect of coincidence time window on intrinsic energy resolution of NaI(Tl) Detector", *V. Ranga, Snigdha Sharma, S. Rawat,* ***G. Anil Kumar***, DAE Symposium on Nuclear Physics (Govt. of India), Vol. 62 (2017) 1108.
10. A new phoswich design of CsI:Tl /GGAG:Ce,B scintillators for pulse shape discrimination", *S. Rawat, M. Tyagi,* ***G. Anil Kumar****, S. C. Gadkari*, DAE Symposium on Nuclear Physics (Govt. of India), Vol. 62 (2017) 1106.
11. Pulse shape discrimination properties of boron co-doped GGAG:Ce scintillator for charged particles and gamma rays, S. Rawat, *M. Tyagi, Y. K. Gupta, D. C. Biswas, G. K. Prajapati, R. P. Vind, R. V. Jangale, B. V. John,* ***G. Anil Kumar****, S. C. Gadkari*, DAE Symposium on Nuclear Physics (Govt. of India), Vol. 62 (2017) 1110.
12. Efficiency calibration of $CeBr_3$ scintillator in close-geometry: Simulations and measurements*,* ***G. Anil Kumar****, A. Bhagwat, S. Panwar, Snigdha Sharma, V. Ranga, S. Rawat and M. Dhibar,* presented *in* IEEE Nuclear Science Symposium and Medical Imaging Conference held in Atlanta, USA during 21-28 October 2017.
13. Intrinsic resolution of NaI(Tl) using PIXIE-4 data acquisition system, *V. Ranga, Snigdha Sharma, S. Rawat, M. Dhibar,* ***G. Anil Kumar***, presented in IEEE Nuclear Science Symposium and Medical Imaging Conference held in Atlanta, USA during 21-28 October 2017.
14. Radiation dose derived from the exposure to attached and unattached progeny of radon and thoron in Garhwal Himalaya. *Mukesh Prasad, Peter Bossew,* ***G. Anil Kumar****, Rosaline Mishra and R. C. Ramola*, *Proc. 13th National DAE-BRNS Symposium on Nuclear and*

Radiochemistry (NUCAR-2017), ISBN : 81-8372-080-3, Page No. 668-669.

15. The radiological and chemical risk assessment from the exposure to uranium and heavy metals in drinkable groundwater, *Mukesh Prasad,* ***G. Anil Kumar,*** *R. C. Ramola*, presented in 2nd National Conference on Radiation Awareness and Detection in Natural Environment (RADNET-II) held during 25-27 September, 2017 in Gurukul Kangri Vishwavidyalaya Haridwar, Uttarakhand, India.

16. A comparative study of radon levels in Himalayan springs and hand pumps using scintillation detector based RnDuo and semiconductor detector based RAD7 monitors, *Mukesh Prasad,* ***G. Anil Kumar****, B.K. Sahoo, R. C. Ramola*, presented in 20th National Conference on Solid State Nuclear Track Detectors and Their Applications (SSNTDs-20) held during 26-28 October, 2017 at Vidya Vikas Institute of Engineering and Technology, (VVIET), Mysuru, India.

17. Dose assessment from the exposure to thoron and its progeny in the indoor environment, *Mukesh Prasad,* ***G. Anil Kumar****, R. C. Ramola*, presented in 20th National Conference on Solid State Nuclear Track Detectors and Their Applications (SSNTDs-20) held during 26-28 October, 2017 at Vidya Vikas Institute of Engineering and Technology, (VVIET), Mysuru, India

18. Efficiency studies on $Gd_3Ga_3Al_2O_{12}$ scintillators: Simulations and measurements, S. Rawat, M. Tyagi, ***G. Anil Kumar***, S. C. Gadkari, presented in SCINT-2017 held in France during 18-22 September 2017.

19. Activity Measurements of Co-60 Using Modified Sum-peak Method, S. Rawat, *M. Dhibar and* ***G. Anil Kumar***, 20th National Seminar on Crystal Growth and Applications, BARC, Mumbai, (2016) 274.

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