

NATIONAL BOARD FOR HIGHER MATHEMATICS

For Review : 68 RESEARCH PROJECT PROPOSALS - 2023 (PART I) - Prof. Mahuya Datta, Chair-Research Project Committee

Sr No	NBHM Ref No	Name, Affiliation & Address, Phone of PI/Applicant	Email ID/s	Title of the project	Assigned to RP Committee Member	RPC decision	JRF is approved (only if requested)
1	RP-2/2023(I)	Dr. Vimala Ramani Department of Mathematics, College of Engineering, Guindy, Anna University, Chennai 600025 Phone : 044-2235 8538/ 9840088729	vimalaramani99@yahoo.co m, vimalaramani@annauniv.e du	Geometric formality of flag manifolds, complex K-ring and topological complexity of oriented flag manifolds	Mahuya	Strongly approved	JRF approved
2	RP-6/2023(I)	Dr. Santan Kumar Department of Mathematics, NIT Silchar, Silchar-788010, Assam, India Phone: +91 8292003793	santan@math.nits.ac.in	Elastodynamic Waves in Complex Stratified Structures: A Mathematical Approach	Surya	Accept	JRF approved
3	RP-9/2023(I)	Dr. Shiv Kumar Gupta, Associate Professor Department of Mathematics, Indian Institute of Technology Roorkee, Roorkee-247 667, India Phone: 01332-285379, Mobile: 63971 87646	s.gupta@ma.iitr.ac.in, skgiitr@gmail.com	Developing solution algorithms and optimality analysis for semi-infinite optimization problems having vanishing constraints	Arup	Approved	JRF not approved
5	RP-16/2023(I)	Dr. Mehraj Ahmad Lone Department of Mathematics, National Institute of Technology Srinagar, J& K, India-190006.	mehrajlone@nitsri.ac.in	Minimal Surfaces and Their Construction by Different Techniques	Mahuya	Approved	JRF approved
6	RP-18/2023(I)	Prof. Manish Kumar, Ph.D. (IIT-ISM Dhanbad), FIMA (UK) Associate Professor Department of Mathematics Birla Institute of Technology & Science, Pilani Hyderabad Campus, Jawahar Nagar, Shameerpet Mandal Hyderabad 500 078, Telangana, Phone: +91-40 66303622(0)	manishkumar@hyderabad. bits-pilani.ac.in	Uncertainty Principles in Generalized Function Spaces: theory and applications"	Nikita	Approved	JRF not apporved
9	RP-28/2023(I)	Professor Anupam Singh A469 Main Building IISER Pune, Dr Homi Bhabha Road, Pashan Pune 411008 India Phone:020-2590-8089 Email: anupamk18@gmail.com, anupam@iiserpune.ac.in		Differential Central Simple Algebra and Differential Splitting	Surya	Strongly approved*	JRF approved
10	RP-33/2023(I)	Lakshmi Kanta Patra Room No-B211, Department of Mathematics, IIT Bhilai, GEC Campus, Sejbarah, Raipur, India-492015 Phone: 8617898692		Improved confidence interval estimation for restricted parameter of certain location-scale family of distributions.	Arup	Accept	No JRF support

11	RP-37/2023(I)	Dr. Jagmohan Tanti Department of Mathematics, Babasaheb Bhimrao Ambedkar University, Vidya Vihar, Rae-Bareli Road, Lucknow-226025, Uttar Pradesh, India. Phone: 9570153251, 8210882751 Email: jagmohan.t@gmail.com		Study on Euler's criterion for prime orders	Surya	Approved	No JRF support
12	RP-38/2023(I)	Dr. Veeekesh Kumar Department of Mathematics, Indian Institute of Technology, Dharwad, WALMI Campus, P.B. Road (Near High Court), Karnataka, India 580011 Phone: +91 6388266351 Email: veeekeshk@iitdh.ac.in		Fractional parts of powers of real algebraic numbers and related problems	Surya	Approved	JRF support approved
13	RP-11/2023(I)	Dr. R. Inku, Associate Professor, Dept of Computer Science & Engineering, IIT Guwahati - 781039. Phone: 9678070960/03612582371	rinkulu@iitg.ac.in, rinkulu@gmail.com	Visibility in Dynamic Polygonal Domains.	Jaikumar	Approved	JRF is not required
14	RP-42/2023(I)	Manish Kumar Pandey		Determination of Siegel cusp forms and studying zeros of symmetric square L-function	Surya	Accept	JRF not required
15	RP-45/2023(I)	Dr. T. Karthick, Associate Professor, Indian Statistical Institute, Chennai Centre, 110 Nelson Manickam Road, Aminjikarai, Chennai-600029. Phone: +91-9444296256, +91- 6381557472	karthick@isichennai.res.in, tlkrkiitm@gmail.com	Chromatic bounds for some special classes of graphs	Nikita	Strongly approved	Post-doc approved
16	RP-48/2023(I)	Dr. S Selvaraja, School of Basic Sciences (Mathematics), Indian Institute of Technology Bhubaneswar Argul, Khordha PIN - 752050, Odisha Phone: 63831 26339	selvas@iitbbs.ac.in	Exploring Componentwise Linearity in Powers of Cover Ideals for Hypergraphs.	Jaikumar	Approved	Post-doc approved
17	RP-54/2023(I)	Dr. T. Kavaskar, Assistant Professor, Department of Mathematics, Central University of Tamil Nadu, Neelakkudi Campus, Thiruvarur- 610101, Tamil Nadu. Phone: (0)9965854701	t_kavaskar@yahoo.com, t.kavaskar@gmail.com, t.kavaskar@cutn.ac.in	Problems owith Unityn Zero- Divisor Graph of a Commutative Ring with Utility.	Surya	Accept	JRF Support approved
18	RP-57/2023(I)	Dr. Chaman Kumar, M-109, First Floor, Department of Mathematics, Indian Institute of Technology, Roorkee, Roorkee-247 667, Uttarakhand. Phone: +91-1332-284901/(Mob) +91- 74 520 53 699	chaman.kumar@ma.iitr.ac.in	Regime switching stochastic differential equations and their numerical studies.	Arup	Approved	JRF approved

19	RP-58/2023(I)	Dr. Satish Kumar Pandey, Office: A-206 [R&D Building] Department of Mathematics Indraprastha Institute of Information Technology Delhi (IIT-Delhi) Okhla Industrial Estate, Phase-III New Delhi, Delhi 110020, India Phone : (+91)11-269 07 3 69	salrsl-r@iitqld.ae.in	Classification of symmetric norms on $B(H)$	Nikita	Approved	JRF Approved
20	RP-59/2023(I)	Dr. Abhishek Mukherjee Department of Mathematics Kalna College Kalna, Purba Bardhaman-713409, West Bengal, India 2022		Surface Group Representations to isometries of four and five dimensional Hyperbolic Space	Mahuya	Approved	JRF not approved
21	RP-65/2023(I)	Dr. Sandeep Singh Chahal Assistant Professor Department of Mathematics Akal University Talwandi Sabo, Bathinda, Punjab Phone: 9050300059	chahal.maths@gmail.com	"On Sumset Problems in Different Types of Groups."	Jaikumar	Approved	JRF approved
22	RP-67/2023(I)	Dr. Rajan Arora, Associate Professor, Department of Applied Mathematics & Scientific Computing, IIT Roorkee, Saharanpur Campus, Saharanpur-247001, U.P., India. Phone: 0132-2714358	rajan.arora@as.iitr.ac.in, rajan100@gmail.com	Analytical and Numerical Study of Nanofluid Flow over a Stretching Sheet in a Porous Medium	Mythily	Accept	No JRF support