# Second List of recommended proposals under SERB-MATRICS Special CoVID-19 Call

| S. NO | Filename | PI Name | Institution Name | Project Title | Sub Area |
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| 1. | MSC/2020/000165 | Dr. Dootika Vats | Indian Institute of Technology Kanpur | Simulating with confidence: Accurate estimation in the study of COVID-19 | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |
| 2. | MSC/2020/000252 | Prof. Madhuchhanda Bhattacharjee | University of Hyderabad | Spatio-Temporal Modelling and Analysis of COVID19: A domestic and global perspective | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |

| 3. | MSC/2020/000319 | Dr. M Michael Gromiha | Indian Institute of Technology Chennai | Adapting the standard SIR model for COVID-19 and effects of climate and lockdowns on infectious spread of SARS-CoV-2 | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |
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| 4. | MSC/2020/000329 | Dr. Malay Bhattacharyya | Indian Statistical Institute Kolkata | Network Based Prediction of COVID-19 Spread in India under Migration | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |
| 5. | MSC/2020/000345 | Dr. Minerva Mukhopadhyay | Indian Institute of Technology Kanpur | Modelling and Prediction of COVID-19 Outbreak: Analyzing Possible Effects of Lockdown, Testing and Urbanicity | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |

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| 6. | MSC/2020/000409 | Prof. Susmita Ghosh | Jadavpur University | Identifying Important Factors Impacting the Spread and Mortality Rate of COVID-19 Using Biclustering Approach | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |
| 7. | MSC/2020/000457 | Dr. Ramesh Chandra Poonia | Amity University | Development of Prediction Model for COVID-19 using Machine Learning | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |
| 8. | MSC/2020/000295 | Dr. Peeyush Mehta | Indian Institute of Management Calcutta | Healthcare Supply Chain and Capacity Modeling during a Pandemic | Quantitative Social Science Approaches for Epidemiological Models |

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| 9. | MSC/2020/000085 | Dr. Ramanathan Srinivasan | Indian Institute of Technology Chennai | An SEIR model to estimate the effect of pharmaceutical and non-pharmaceutical interventions on the spread of Covid19 | Mathematical Modeling of COVID-19 Spread |
| 10. | MSC/2020/000186 | Prof. Rama Kant | University of Delhi, North Campus | Theoretical Model for Inactivation Kinetics of Infectious Human Corona Virus on Metal Surfaces | Mathematical Modeling of COVID-19 Spread |
| 11. | MSC/2020/000215 | Prof. Manoj Varma | Indian Institute of Science Bangalore | Modelling the impact of sensor performance on epidemic management | Mathematical Modeling of COVID-19 Spread |

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| 12. | MSC/2020/000289 | Prof. Soumyendu Raha | Indian Institute of Science Bangalore | Containment Control over Economics Aware Local COVID-19 Infection Dynamics Networks | Mathematical Modeling of COVID-19 Spread |
| 13. | MSC/2020/000300 | Dr. Anubhab Roy | Indian Institute of Technology Chennai | Mathematical modelling of aerosolized transmission of pathogens via turbulent expiratory events | Mathematical Modeling of COVID-19 Spread |
| 14. | MSC/2020/000334 | Dr. D Manjunath | Indian Institute of Technology Bombay | Controlling Epidemics | Mathematical Modeling of COVID-19 Spread |
| 15. | MSC/2020/000369 | Dr. Nitu Kumari | Indian Institute of Technology, Mandi | Modeling COVID-19 to study the impact of various societal factors on the control of Pandemic | Mathematical Modeling of COVID-19 Spread |

| 16. | MSC/2020/000438 | Dr. P. Chellapandi | Bharathidasan University | Repurposing of clinically approved drugs for SARS-CoV-12 (COVID-19) using systems pharmacology-based network modeling | Mathematical Modeling of COVID-19 Spread |
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| 17. | MSC/2020/000122 | Dr. M.S. Santhanam | Indian Institute of Science Education and Research, Pune | Real-time infectious diseases hazard map for India based on transportation networks | Focused Algorithms for Infectious Disease Modeling |
| 18. | MSC/2020/000350 | Prof. Rajat Kumar De | Indian Statistical Institute Kolkata | Understanding the Efficacy of Existing Drug Molecules on COVID-19 through an Interactive Pathway: A Deep Learning based Predictive Model | Focused Algorithms for Infectious Disease Modeling |

| 19. | MSC/2020/000370 | Dr. Rati Sharma | Indian Institute of Science Education and Research Bhopal | Modeling the spread of the Covid19 viral infection at the cellular level | Focused Algorithms for Infectious Disease Modeling |
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| 20. | MSC/2020/000374 | Dr. Rishi Ranjan Singh | Indian Institute of Technology Bhilai | Identifying optimal immunization strategies in Indian context against COVID-19 | Focused Algorithms for Infectious Disease Modeling |
| 21. | MSC/2020/000375 | Dr. Anupama Sharma | Birla Institute of Technology & Science, Pilani - Goa | Modeling and Forecasting the Effects of Long-Term Interventions on COVID-19 using a Network-based Approach | Focused Algorithms for Infectious Disease Modeling |

| 22. | MSC/2020/000498 | Dr. Debashree Bandyopadhyay | Birla Institute of Technology & Science Pilani, Hyderabad Campus | Efficient prediction strategy of covid 19 based on pandemic data and immunoinformatics, integrated on artificial intelligence (AI) platform | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |
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| 23. | MSC/2020/000606 | Dr. Deepak N. Subramani | Indian Institute of Science | DECOVID: Data-assimilation and Error Correction Of Viral Infectious Disease Models | Statistical Machine Learning, Forecasting and Inferences from Pandemic Data |
| 24. | MSC/2020/000471 | Dr. Wilfred Godfrey Wilson | Atal Bihari Vajpayee Indian Institute of Information Technology and Management | Agent based spatial modeling of covid-19 pandemic for urban areas | Quantitative Social Science Approaches for Epidemiological Models |

| 25. | MSC/2020/000500 | Dr. Anurag Singh | National Institute of Technology, Delhi | Development of Dynamic Mathematical Modeling for COVID-19 Spread and Containment | Mathematical Modeling of COVID-19 Spread |
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| 26. | MSC/2020/000536 | Dr. Mandar M. Inamdar | Indian Institute of Technology Bombay | Modeling the spread of novel coronavirus (SARS-CoV-2) in host tissue and its potential epidemiological implications for COVID-19 | Mathematical Modeling of COVID-19 Spread |
| 27. | MSC/2020/000592 | Dr. Lopamudra Giri | Indian Institute of Technology | Development of computational and visualization software for evaluating GPCR targeting drugs with the aim of mitigating coronavirus infection level | Focused Algorithms for Infectious Disease Modeling |