International Conference on

Promoting Environmental Technologies for Waste Management and Sustainable Development (WMSD-2021)

12-13 December, 2021

Venue: Hybrid mode (Online & at Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha*)



ORGANIZED BY

IN COLLABORATION WITH



National Environmental Science Academy (New Delhi)



Bhubaneswar City Knowledge Innovation Cluster

(An initiative by the Office of the Principal Scientific Adviser to the Government of India)

IN ASSOCIATION WITH



KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY



CSIR-INSTITUTE OF MINERALS AND MATERIALS TECHNOLOGY



CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY

ABOUT THE CONFERENCE

Environmental and economic implications have compelled proper eco-friendly disposal of modern day wastes and also made it essential to come up with alternative waste management practices that reduce the environmental burden resulting from unwise waste disposal habits. Increasingly vigilant environmental regulators are imposing austere regulations for waste treatment prior to discharge coupled with escalation in the costs for direct disposal present two interrelated problems such as traditional practice of disposing waste loaded with pollutants need to be either discontinued or upgraded and incremental improvement in the waste management technologies, which has always been a game of playing catch-up with the regulations, have inflated infrastructure requirement and treatment cost significantly. Therefore, rather than continuing slow evolution, adaptation of a leapfrogging strategy could be more effective. Although a great deal of research in carried out in various academic and research institutions, their practical applications is rather slow. Additionally, proliferating global population coupled with high demand of commodities are depleting the natural resources in an alarming rate. Therefore, there is an urgent need not only to develop suitable waste disposal strategy but also to augment the waste recycling technologies for resource recovery in a circular economy model. International Conference on Promoting Environmental Technologies for Waste Management and Sustainable Development (WMSD-2021) aims to bring together leading academicians, scientists, researchers, industry experts and policy makers to exchange and share their experiences and on various aspects of Waste Management and Sustainable Development. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of waste management and resource recycling. Selected papers presented in the conference will be published in journals published by NESA or other suitable publishing houses. The conference will feature renowned speakers representing both academia and industry who are renowned experts in various thematic areas. Conference will include a start-up track session, providing opportunity to innovators to showcase new technologies.

CONFERENCE OBJECTIVES

WMSD-2021 will focus on

The Conference aims to focus on sustainable development and emerging issues in waste management. The generation of solid waste has grown manifold and the current pandemic has aggravated the situation to great extent. It is not possible to meet the objectives of Sustainable Development without addressing the concerns raised by improper waste disposal. In view of this, the conference aims to set up a dialogue for sustainable development through effective waste management.

SUB THEMES OF THE CONFERENCE

HYBRID WMSD-2021 offers both an In-Person* and Virtual environment. WMSD 2021 invites papers with the following sub themes

- Agro-waste management
- Burning of the waste and Air Pollution
- Environmental Pollution and Public Health
- Plastic & Polymer recycling and reuse
- Start-up ecosystem in WMSD

- Industrial waste management and Resource recycling
- Soil Pollution and Treatment
- · Wastewater treatment and Reuse

^{*} Only if prevailing government guidelines and pandemic situation permits

NATIONAL ENVIRONMENTAL SCIENCE ACADEMY (NESA), NEW DELHI

This ACADEMY is registered by the provisions of Societies Act XXI of 1860 under the Government of Bihar in 1988, presently has its headquarters at 206, Raj Tower-1, Alaknanda Community Centre, New Delhi. The main objective of the Academy is to bring awareness about environmental issues among the masses by arranging lectures, workshops, training programs, seminars, symposia, conferences, publishing journals, etc.

Aims Objectives and Functions of the Academy

- To enhance and promote the study of the environmental sciences by encouraging students, scientists, researchers, academicians and members of the Academy for pursuing research on environment and allied areas.
- To set up Regional/State Chapters for dissemination of information on environment.
- To motivate and prepare young minds on environmental management.
- To hold Annual Conference of the Academy.
- To organise national/international level conferences, symposia, seminars, meetings and workshops on themes of environmental concerns.
- To publish policy papers, synthesis volumes, proceedings, journals, newsletter, transactions and other publications for the promotion of Environmental Sciences.
- To forward the recommendation of scientists / professors to govt. agencies.

Various eminent personalities have graced the Academy as President. The first President of the Academy was **Dr. K.C. Bose**, Vice-Chancellor of Ranchi University; then Dr. B.S. Attri, Advisor, Ministry of Environment and Forest. Most recently Padmabhushan Dr. S.Z. Qasim was the President of the Academy till June 2015, who is a renowned marine scientist known for his Antarctica mission in 1981-82, he also served as the Secretary at the Deptt. of Ocean Development (now Ministry of Earth Sciences); Member, Planning Commission and Vice-Chancellor, Jamia Millia Islamia, New Delhi. Currently Prof. Javed Ahmad, (Former Dean, Faculty of Science), Jamia Hamdard, New Delhi, is the President of the Academy.

ANNUAL AWARDS

The Academy recognizes the merit and achievements of individuals who have contributed to the field of environmental science, education and societal values by conferring (1) NESA FELLOWSHIP AWARD (2) NESA EMINENT SCIENTIST AWARD (3) NESA SCIENTIST OF THE YEAR AWARD (4) NESA ENVIRONMENTALIST AWARD (5) NESA GREEN TECHNOLOGY INNOVATIVE AWARD (6) NESA DISTINGUISHED AWARD (7) WOMEN EXCELLENCE AWARD (8) NESA YOUNG SCIENTIST AWARD (9) NESA JUNIOR SCIENTIST AWARD. Any life member of the Academy can apply for the awards.

In addition, the Best Oral Presentation and Best Poster Awards are given away during the Annual Conference of the Academy.

PUBLICATIONS

The Academy is publishing the following Journals (Biannual):

- 1) INTERNATIONAL JOURNAL ON AGRICULTURAL SCIENCES
- 2) INTERNATIONAL JOURNAL ON ENVIRONMENTAL SCIENCES
- 3) INTERNATIONAL JOURNAL ON BIOLOGICAL SCIENCES
- 4) INDIAN JOURNAL OF UNANI MEDICINE
- 5) E-NESA Newsletter (Monthly)

BHUBANESWAR CITY KNOWLEDGE INNOVATION CLUSTER

BCKIC is an initiative by the Office of the Principal Scientific Adviser to the Government of India, set up under the direction of the Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC) to seamlessly connect research institutions, academia and corporate towards creation of a Hub & Spoke model, actively facilitating innovation and knowledge creation. The key objectives of BCKIC are:

- Creating a shared ecosystem and providing solution to local and regional problems
- Harnessing the knowledge and expertise available in partnering academic, R&D institutions and industries
- Promoting Capacity Building through exposure visits and workshops
- Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level
- Channelizing Innovation for Social Impact

KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY

Kalinga Institute of Industrial Technology (KIIT) is the premier academic hub in India located at Bhubaneswar, and within a short span of time, it has grown to be one of the finest educational centers in India offering various programs in its 22 schools/departments. KIIT, though a very young institution has performed incredibly well in the rankings conducted by various national and international associations. Founded in 1992 and opened five years later as a centre for higher learning, its commitment to teaching excellence led to the grant of university status under Section 3 of UGC Act, 1956 by the Ministry of Human Resources Development, Govt. of India in 2004, within only seven years of its inception. It is declared as an "Institution of Eminence" by UGC. It is ranked 24th among Indian universities by NIRF in 2020. It is also accredited by NAAC with grade A.

CSIR-INSTITUTE OF MINERALS AND MATERIALS TECHNOLOGY

CSIR-Institute of Minerals and Materials Technology (IMMT) was established on 13.04.1964 as Regional Research Laboratory, Bhubaneswar in the eastern part of India under the aegis of the Council of Scientific and Industrial Research (CSIR), New Delhi. It was renamed in 2007 with a renewed research focus and growth strategy to be a leader in the areas of mineral & material resource engineering. The institute has expertise in conducting basic research and technology oriented programs in a wide range of subjects to address the R&D problems of mining, mineral and metals industries and ensure their sustainable development. For the last one decade, the main thrust of R&D at CSIR-IMMT has been to empower Indian industries to meet the challenges of globalization by providing advanced and zero waste process know-how and consultancy services for commercial exploitation of natural resources through the public-private-partnership (PPP) approach. Today, CSIR-IMMT is the first choice for many mineral based industries. It is also carving out a niche in processing of advanced materials for greater value addition and working on resource use efficiency of critical raw materials.

CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY

Central Institute of Petrochemicals Engineering & Technology (CIPET) (formerly known as Central Institute of Plastics Engineering & Technology (CIPET)) was established in 1968 by the Government of India with the assistance of United Nations Development Program (UNDP). CIPET, Bhubaneswar Center offers an excellent curriculum in plastic, polymer & allied technologies and cutting edge laboratory space for the research and development. The Exclusive R&D Center at CIPET: Bhubaneswar - School for Advanced Research in Petrochemicals (SARP)-LARPM focuses on multidisciplinary research involving various disciplines of Polymer Science & Engineering including Structural Composites, Nanocomposites, Energy Storage and Harvesting, High Temperature Polymers for Aerospace, Recycling & Waste Management, Filtration Membranes, Polymer Coatings including Antimicrobial, Super hydrophobic corrosion resistant, Adhesives, Foams, Fuel Cells etc. CIPET also brings immense expertise on some of the key unmet needs in areas such as biodegradable Polymers.

ENVIRONMENT AND SOCIAL DEVELOPMENT ASSOCIATION

Environment and Social Development Association (ESDA) Delhi is a non-government, non-profit national based voluntary organization, principally dedicated to enhancement of public awareness on preservation and up gradation of environment and management of all forms of air, waste, water and river conservation, plantation, tree protection, sustainable development, social upliftment, gender equality as well as providing platform for "Beti Bachao Beti Padhao" (Save Girl Child) Movement. Since its registration on 23rd July, 2004 under Societies Registration Act-XXI of 1860 in Delhi by a handful of environmentalists, the association has grown with more than 1000 life and patron members from diverse fields of specialization in more than 15 States of India. Its main aims and objectives include educating and creating awareness about environmental and social issues among young minds, students, researchers and general public; setting up regional and state chapters to organize different academic, scientific and mass awareness activities such as National/International level conferences, symposia, seminars, workshops, trainings, meetings, Street Plays etc. on the themes of environmental concerns. ESDA is an open platform of the people who want to work as an Academician, Scientist, Activist, Volunteer, Member, Office Bearer, Advisor and Sympathizer on environmental and social issues. The Society is working passionately to achieve said goals in different parts of the nation and in collaboration and support with esteemed Government and private institutions.

COMMITTEE MEMBERS

CHIEF PATRON

Prof. Achyuta Samanta, Founder, KIIT and KISS

Prof. Javed Ahmad, President, National Environmental Science Academy, New Delhi

PATRONS

Prof. Mrutyunjay Suar, Director General (R & D), KIIT Deemed to be university & Chairman, Bhubaneswar City Knowledge Innovation Cluster

Prof. Suddhasatwa Basu, Director, CSIR-Institute of Minerals and Materials Technology

CONVENERS

Dr. Sushil Kumar Singh, General Secretary, NESA & Scientist-F, DRDO-Solid State Physics Lab, Lucknow Road, Timarpur, Delhi

Dr. K. Sanjay, Chief Scientist, CSIR-Institute of Minerals and Materials Technology

Dr. Smita Mohanty, Director (Principal Scientist) & Head of the CIPET:SARP-LARPM, Bhubaneswar

Dr Jitendra K. Nagar, Assistant Prof., Dept. of Environmental Studies, Dr. Bhim Rao Ambedkar College, (University of Delhi), Yamuna Vihar, Delhi & Chairman & General Secretary, Environment and Social Development Association, Delhi

Dr. Suraj Tripathy, Associate Dean, School of Chemical Technology, KIIT Deemed University

ORGANIZING SECRETARIES

Dr. Prashant Kumar Singh, CEO, BCKIC

Dr. Sankha Chakrabortty, Assistant Professor, School of Chemical Technology, KIIT Deemed University

Mr. Chinmaya Kumar Sarangi, Senior Scientist, CSIR-Institute of Minerals and Materials Technology

Dr. Deeksha Dave, Assistant Professor, Environmental Studies, School of Inter Disciplinary and Trans Disciplinary Studies, IGNOU, Maidan Garhi, New Delhi

ADVISORY COMMITTEE

Dr. Rakesh Chandra Agrawal, Deputy Director General (Agricultural Education) National Director, NAHEP (ICAR-WB), Division of Agriculture Education, Krishi Anusandhan Bhawan-II, Indian Council of Agricultural Research, New Delhi

Prof. Shachi Shah, Director, (Environmental Studies) in the School of Interdisciplinary and Transdisciplinary Studies at IGNOU, New Delhi

Prof. Boyina Rupini, SOITS, Indira Gandhi National Open University, New Delhi

Prof. Dipak Sinha, Department of Chemistry, Nagaland University, Lumami-798627, Nagaland

Prof. Saumana Dutta, Rajasthan University, Jaipur

Prof. Tanu Jindal, Department of Environmental Science and Technology, Amity University, Noida **Dr. Suman Mor**, Associate Professor, Department of Environment Studies, Punjab University, Sector 14, Chandigarh-160014, Punjab

Prof. Parimal Pal, HAG Professor, Department of Chemical Engineering NIT Durgapur

SCIENTIFIC COMMITTEE (International)

Prof. Cecilia Stålsby Lundborg, Karolinska Institute, Sweden Prof. Gerrard Eddy Jai Poinern. Murdoch University. Western Australia

SCIENTIFIC COMMITTEE (National)

Prof. Satyavati Sharma, IIT Delhi, New Delhi

Prof. S.S. Katewa, Retd. Head, Department of Botany, M.L.Sukhadia University, Udaipur.

Prof. P.R. Vyas, Department of Geography, M.L.Sukhadia University, Udaipur.

Prof. Bhawna Pathak, School of Environment and Sustainable Dev., Central University of Gujarat, Gandhinagar

Prof. S.S. Gaurav, Head, Dept. of Genetics and Plant Breeding, C.C.S. University, Meerut, U.P.

Dr. Akanksha Mishra, Assistant Professor, Kamla Nehru College, Delhi University

Dr. Raaj K. Maheshwari, Former Professor Department of Chemistry SBRM Govt PG College, Nagaur, Rajasthan & Freelance Investigator & Scientific Writer

Dr. Abid Ali Ansari, Asst. Prof., Dept. of Biology, F/Science, University of Tabuk, Kingdom of Saudi Arabia

Dr. Anita Jain, Head, Department of Botany, Vidhya Bhawan Rural Institute, Udaipur (Rajasthan),

Dr. Amit Kumar Rai, Scientist C, Microbial Resource Division, Institute of Bioresources and Sustainable Development, Sikkim Centre, Near Metro Point, Tadong, Sikkim

Prof. Piyush Malaviya, Professor, Dept. of Environmental Sciences, University of Jammu, Jammu **Dr. Namita Das Saha**, Scientist (Environmental Sciences), Centre for Environment Science and Climate Resilient Agriculture (CESCRA) Indian Agricultural Research Institute Pusa, New Delhi **Dr. Jaspal Singh Chauhan**, Dept. of Himalayan Aguatic Biodiversity, HNB Garhwal University

Uttarakhand

Dr. G.S. Deora, Department of Botany, ML Sukhadia University, Udaipur.

Dr. Girima Nagda, Department of Zoology, M.L.Sukhadia University

Dr. Ashok Kumar Kakodia, Director Research at Govind Guru Tribal University, Banswara, Rajasthan

Dr. Vartika Jain, Department of Botany, Government College, Udaipur

NESA EXECUTIVE COMMITTEE

Prof. Javed Ahmad, President, NESA, Delhi & Former Dean, Faculty of Science, Jamia Hamdard, ND

Dr. Kshipra Misra, Vice President, Delhi & Former Additional Director & Head, Department of Biochemical Sciences (DBCS) Defense Institute of Physiology and Allied Sciences (DIPAS), DRDO, Delhi

Prof. Nafees Khan, Vice President, Delhi & Head, Dept. of Botany, AMU, Aligarh, U.P.

Prof. AshwaniWanganeo, Vice President, Delhi & Former, HOD Deptt.of Environmental Sciences &Limnology,B.University, Bhopal and Director, University Institute of Technology, B.University, Bhopal.

Dr. MridulSahani, Vice President, NESA & Dr. B Sahni Clinic, Shivpuri Patna, Bihar

Dr. PrabhakarRanjan, Joint Secretary, Delhi

Prof. Altaf Ahmad, Joint Secretary cum Treasurer, NESA & Dep. of Botany, AMU, Aligarh, U.P.

Dr. Syed S. Hassan, Joint Secretary & Scientist (Fisheries) & NSS Programme Officer,

Department of Fisheries Resource Management, College of Fisheries, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab

Dr. Sayeed Ahmad, Joint Secretary, NESA, Delhi & Associate Professor, Department of Pharmacognosy & Phytochemistry, School of Pharmaceutical Education & Research, Jamia Hamdard, New Delhi

- Dr. Sushil Kumar Singh, General Secretary, NESA Delhi
- Mr. RK Sinha, Executive Secretary, NESA, Delhi & Chairman Prajna Foundation, Delhi
- **Dr. ShriPrakash**, Mem. Executive Committee, NESA Delhi & Department of Zoology, K.A.P.G. College Allahabad, U.P., India.
- **Dr. Ashok Dhakad**, Mem. Executive Committee, NESA Delhi & Scientist (Forestry), Chamber No. 131-B, Department of Forestry & Natural Resources, Punjab Agricultural University, Ludhiana, Punjab, India
- **Dr. ShefaliGola**, Mem. Executive Committee, NESA Delhi & GD Goenka University, G D Goenka Education City, Sohna Gurgaon Road Sohna, Haryana
- **Dr. BalwantRawat**, Mem. Executive Committee, NESA Delhi & Assistant Professor, Department of Agriculture and Forestry, Graphic Era Hill University, Dehradun, Uttarakhand, India
- **Dr. R.S. Tomar**, Mem. Executive Committee, NESA Delhi & Teaching Associate, College of Horticulture and Forestry, Rani Lakshmi Bai Central Agricultural University, Jhansi, U.P.
- **Dr. Vaishali Mishra**, Mem. Executive Committee, NESA Delhi & Lecturer In Chemistry, ITL Public School, Dwarka Sector 9, New Delhi
- **Dr. Seema Akbar**, Mem. Executive Committee, NESA Delhi & Principal Investigator, National Facility for Nonclinical Safety Evaluation of Unani Formulations (DST/CCRUM joint venture) Assistant Director, Regional Research Institute of Unani Medicine (CCRUM,AYUSH,MOAYUSH, GOI) the University of Kashmir campus, Srinagar, JK India
- Mrs. VandanaSinha, Mem. Executive Committee, NESA Delhi & Social Worker, Delhi

LOCAL ORGANIZING COMMITTEE

- Dr. Siba Prasad Panda, Head, Environment, Hindalco Industries Ltd.
- **Dr. Chinmay Pradhan**, Head of the Department and Course Coordinator, M.Sc Environmental Science, Department of Botany, Utkal University, VaniVihar, Bhubaneswar, Odisha
- **Dr. Srinivasa Brahmana Pothula**, Principal Scientist, Agronomy, ICAR-iiwm, Bhubaneswar Indian institute of water Management, Chandrasekharpur, Bhubaneswar, Odisha-751023
- **Dr. Rajeeb Kumar Mohanty**, Principal Scientist, ICAR Indian institute of water Management Bhubaneswar-751023, Odisha
- **Dr. Jyoti Ranjan Rout**, Assistant Professor, School of Biological sciences AIPH University, Lewis Road, Nageswartangi, Bhubaneswar-751002
- **Dr. Pradip Kumar Pattajoshi**, Manager (Environmentalist), NALCO, Department of Environment NALCO, Damanjodi, Odisha-763008
- Dr. B. Saravanakumar, CIPET:SARP-LARPM, Bhubaneswar
- Dr. Akshaya Palai, CIPET:SARP-LARPM, Bhubaneswar

CALL FOR ABSTRACTS AND FULL LENGTH PAPERS

The participants are invited to submit their abstracts and full length papers on the theme and sub themes of the Conference. The abstract should be within 250-300 words in English font 'Times New Roman' with size of '12'. The full length paper should be within 3000-4000 words in length, including an abstract (about 300 words) and 4-5 keywords. The abstracts will be released in 'Souvenir and Abstract Book' on 12 December, 2021 in the Inaugural Session of the Conference, while selected full length papers will be published in NESA Journals. The participants may send their abstracts by 30th November 2021 and full length papers by 6th December 2021 online to 2021wmsd@gmail.com The participants may present their papers in the Conference by oral/poster.

Guidelines for submission: http://journal.nesa-india.org/instruction/IJES

POSTER PRESENTATION

Papers are invited for poster presentation.

The poster should be related with the topic and sub themes of the Conference. The poster size should be 2x3 feet.

In addition, startups shall submit their work/poster as per above deadline for consideration in start-up track slot.

PRE-CONFERENCE WORKSHOP

Pre-conference workshops are being organized on 11th December, 2021. Independent workshops will be organized in the area of environmental analytics, environmental genomics and bioplastics. Participants can join the pre-conference workshop by separately registering for any of the theme area.

CONFERENCE AWARD

The Organizing Committee of WMSD-2021 will confer the following awards during the conference:

- 1. WMSD-2021 Best Oral Presentation Award
- 2. WMSD-2021 Best Poster Presentation Award
- WMSD-2021 Related to Topic (Best Idea on reducing environmental pollution or restoring ozone layer

ACCOMMODATION AND TRANSPORT

The Organizing Committee of the WMSD-2021 will arrange some rooms in the guest house near the venue for the invited speakers, guests and paper presenters. The organizing committee will guide/facilitate this process if contacted in advance. Interested participants may email on **2021wmsd@gmail.com** for their requirement regarding the accommodation.

Please contact to the Conference Volunteers for accommodation and local transport. The details are given below:

SI. No.	Name	Contact Number
1.	Gian Chand Kashyap (NESA)	9811238475 / 9811238995
2.	Rakesh Kumar Roy (NESA)	9971383650
3.	Dr. Sankha Chakrabortty	07602380154
4.	Kalyani Bhagabani	8763230804

IMPORTANT DATES FOR

Conference Dates:	12-13 December, 2021
Registration and Abstract Submission Starts:	13.09.2021
Last Date of Conference Registration without late payment:	25.11.2021
Last Date for Pre-conference workshop Registration	03.12.2021
Abstract submission Deadline:	30.11.2021
Full length paper submission Deadline:	06.12.2021

Note: The above dates are mandatory and strictly followed by Organizing and Publication Committee.

REGISTRATION:

Indian Delegates

Category	Regular Registration (Till 25.11.2021)	Late & On-Spot Registration* (After 25.11.2021)
Distinguished Faculties/Scientists/NESA/ESDA	Rs. 1200.00	Rs. 1500.00
Research Scholars	Rs. 1000.00	Rs. 1200.00
Students (Graduate/PG)	Rs. 1000.00	Rs. 1200.00
Students (KIIT Institute)	Rs. 800.00	Rs. 1000.00
Corporate Delegates**	Rs. 3500.00	Rs. 4000.00
Pre-conference workshop	Rs. 800.00	Rs. 1000.00

Foreign Delegates: \$ 40

Interested applicants can register at www.bckic.in/wmsd-2021

PAYMENT

An online payment system is available at registration website.

^{*} Limited seats available for on-spot registration

^{**} Please contact for group participation

WMSD-2021 SECRETARIAT

NATIONAL ENVIRONMENTAL SCIENCE ACADEMY

206, Raj Tower-I, Alaknanda Community Centre, New Delhi - 110

019 Tel.: 011-2602 3614

Mobile: 9971850015/ 9811238475/ 9971383650

E-mail: 2021wmsd@gmail.com

www.bckic.in/wmsd-2021

Sponsorship

A few sponsorship slots are available under Platinum, Gold, Silver and Bronze sponsorship categories.

For Details Please Contact Dr. Suraj Tripathy

Associate Dean, School of Chemical Technology, KIIT Deemed University Email: suraj.tripathy@kiitbiotech.ac.in

Ph: 9337476544

