UNIVERSITÀ DEGLI STUDI DI MILANO

*Curriculum vitae*

**AL MAGNIFICO RETTORE**
**DELL'UNIVERSITA' DEGLI STUDI DI MILANO** **COD. ID: 5358**

Il sottoscritto chiede di essere ammesso a partecipare alla selezione pubblica, per titoli ed esami, per il conferimento di un assegno di ricerca presso il Dipartimento di **Food, Nutrition and Environmental Sciences**

Responsabile scientifico: **Prof. Romano Diego**

**[Chandra Mohan Chandrasekar]**

**CURRICULUM VITAE**

INFORMAZIONI PERSONALI

| | |
|---|---|
| **Cognome** | Chandrasekar |
| **Nome** | Chandra Mohan |

ISTRUZIONE E FORMAZIONE

| **Titolo** | **Corso di studi** | **Università** | **anno conseguimento titolo** |
|---|---|---|---|
| Dottorato Di Ricerca | Technology | Anna University | 2021 |
| Master (Laurea Magistrale) | Food Technology | Anna University | 2015 |
| Laurea Triennale | Biotechnology | Anna University | 2013 |

LINGUE STRANIERE CONOSCIUTE

| **lingue** | **livello di conoscenza** |
|---|---|
| Tamil | Native Language |
| English | Advanced |

PREMI, RICONOSCIMENTI E BORSE DI STUDIO

| **anno** | **Descrizione premio** |
|---|---|
| 2016 | Awarded Junior Research Fellowship (JRF) by Department of Biotechnology, New Delhi |
| 2017 | Awarded Senior Research Fellowship (SRF) by Council of Scientific and Industrial Research (CSIR), New Delhi |
| | |

ATTIVITÀ DI FORMAZIONE O DI RICERCA

| **descrizione dell'attività** |
|---|

ATTIVITÀ PROGETTUALE

| **Anno** | **Progetto** |
|---|---|
| **2010** | **Fuels from chicken feathers** |
| **2011** | **'Effect of humic acid on Microalgae (chlorella) cultivation' & 'An efficient micro propagation system for Pergularia daemia: a medicinally important plant'** |
| **2012** | **'Comparative screening of microbes and heavy metals in the five selected cannals of the cooum river' & 'Production of protease and its effect by microbes'** |
| **2013** | **'Isolation, Characterization and Production of Enzymes from Dairy Effluent Bacteria: Immobilization of Iron Nanoparticles with Enzymes'** |
| **2014** | **'Isolation, Characterization and Production of Enzymes from Dairy Effluent Bacteria: Immobilization of Iron Nanoparticles with Enzymes'** |
| **2015** | **Effect of Clove and Cinnamon Assimilated Edible Films on the Shelf Life of Different Raw Meats** |
| **2016** | **'Metabolic Engineering of Bacillus megaterium for Enhanced Production of D (-) Pantothenic Acid and its Application for the Development of Functional Foods' & 'Fortification of antioxidants, polyphenols and vitamins in food products' & 'Development of Bioactive Edible Packaging Films and Expedition of its Preservation and Quorum Quenching Potentials'** |
| **2017** | **'Development of Innovative Packaging System and Novel Analysis Model for Highly Perishable Food Products' & 'Development of Bioactive Edible Packaging Films and Expedition of its Preservation and Quorum Quenching Potentials'** |
| **2018** | **'Isolation and characterization of starch from agro industrial wastes for food packaging applications' & 'Extraction and characterization of nano crystalline cellulose from agro industrial wastes for food packaging applications' & 'Modification of nano cellulose fibers to produce stable transparent food packaging films'** |
| **2019** | **'Production and characterization of nanoparticles - Nanoparticles in food packaging applications' & 'Development of Bioactive Edible Packaging Films and Expedition of its Preservation and Quorum Quenching Potentials'** |
| **2020** | **'Surface and bulk immobilization of active compounds for development of bioactive packaging films' & 'Development of Bioactive Edible Packaging Films and Expedition of its Preservation and Quorum Quenching Potentials'** |

| | |
|---|---|
| **2021** | **'Thermal and non-thermal processing of underutilized fruits and vegetables in north east India – Improvement of Shelf life, Bioavailability of biomolecules and processing' & 'Modification of starch molecules for development of stable biopolymer packaging films'** |
| **2022** | **'Thermal and non-thermal processing of underutilized fruits and vegetables in north east India – Improvement of Shelf life, Bioavailability of biomolecules and processing' & 'Modification of starch molecules for development of stable biopolymer packaging films'** |

CONGRESSI, CONVEGNI E SEMINARI

| **Data** | **Titolo** | **Sede** |
|---|---|---|
| 28.02.2012 | NANO REVELATION - CONCEPTS OF NANOSCALE | SCIENCE CITY |
| 20.03.2012 | NANO REVELATION – ASSEMBLING NANOMATERIALS | SCIENCE CITY |
| 17.08.2012 | NANO REVELATION – NANO MEDICINE | SCIENCE CITY |
| 20.04.2012 | NANO REVELATION - SENSING THE NANO | SCIENCE CITY |
| 24.02.2012 – 26.02.2012 | VISAI 2012 -2nd INTERNATIONAL PROJECT COMPETITION AND EXHIBITION | VEL TECH TECHNICAL UNIVERSITY |
| 13.07.2010 | MED-HARTZ 10 - NATIONAL LEVEL TECHNICAL SYMPOSIUM | VEL TECH MULTI TECH ENGG. COLLEGE |
| 21.07.2011 – 22.07.2011 | NATIONAL CONFERENCE ON RECENT TRENDS IN BIOTECHNOLOGY TOWARDS MEDICINE AND HEALTH CARE | KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY |
| 21.12.2011 | NATIONAL CONFERENCE ON IMPACT OF BIOTECHNOLOGY IN HEALTHCARE AND INDUSTRY | VEL TECH HIGH TECH ENGG. COLLEGE |
| 15.03.2012 – 16.03.2012 | NATIONAL LEVEL SEMINAR ON CLINICAL TRIAL MANAGEMENT A BREAKTHROUGH IN MEDICINAL BIOTECHNOLOGY | VEL TECH HIGH TECH ENGG. COLLEGE |
| 29.02.2012 | NATIONAL LEVEL SEMINAR ON FRONTIERS IN MARINE BIOTECHNOLOGY | VEL TECH HIGH TECH ENGG. COLLEGE |
| 09.02.2012 | NATIONAL CONFERENCE ON RECENT | BHARATHIDASAN UNIVERSITY |

| | | |
|---|---|---|
| – 10.02.2012 | ADVANCES IN PLANT BIOTECHNOLOGY TOWARDS NEXT GENERATION REVOLUTION | |
| 03.09.2010 | TECHNICAL REPORT ON INDUSTRIAL VISIT TO AAVIN MILK PROCESSING UNIT | VEL TECH HIGH TECH ENGG. COLLEGE |
| 07.02.2014 – 08.02.2014 | SOFTECH 2014 - TECHNOLOGIES AND TECHNOLOGISTS FOR INDIAN FOOD INDUSTRIES - INDUSTRY ACADEMIA STUDENT MEET FOR PROSPECTIVE EMPLOYMENT AND CAREER GUIDANCE | INDIAN INSTITUTE OF CROP PROCESSING TECHNOLOGY |
| 14.10.2015 | AWARENESS WORKSHOP ON HERBS FOR HEALTHY FUTURE | NATIONAL AGRO FOUNDATION AND ANNA UNIVERSITY |
| 07.01.2015 – 08.01.2015 | INTERNATIONAL SYMPOSIUM ON ADVANCES IN STORAGE AND POST HARVESTPROCESSING OF FOODS FOR BETTER HEALTH | ADVANCE TRAINING CENTRE IN FOOD MANUFACTURE, UNIVERSITY OF NEW SOUTH WALES, AND ANNA UNIVERSITY |
| 16.07.2018 | SEMINAR ON FOOD SAFETY CONTINUUM - CHALLENGES AND OPPORTUNITIES | ANNA UNIVERSITY, ASSOCIATION OF FOOD SCIENTISTS AND TECHNOLOGISTS INDIA |
| 19.10.2016 | ACADEMIA - INDUSTRY ROAD MAP FOR BETTER HEALTH and NUTRITION THROUGH FOOD PROCESSING TECHNOLOGIES | ANNA UNIVERSITY |
| 26.02.2015 – 01.03.2015 | CHENNAI SCIENCE FESTIVAL 2015 - FOOD AND AGRICULTURE | SCIENCE CITY |
| 28.02.2013 | NATIONAL SCIENCE DAY CELEBRATION - NATIONAL LEVEL SEMINAR ON PROSPECTS OF MARINE BIOTECHNOLOGY FOR INDUSTRIES AND STAKE HOLDERS | AMET UNIVERSITY |

PUBBLICAZIONI

| **Libri** |
|---|
| Prakash Kumar Nayak, Chandrasekar Chandra Mohan, and Kesavan Radha krishnnan, Food Bioactives Functionality and Applications in Human Health, Functional foods from different sources, Apple Academic Press Inc., CRC Press, ISBN: 9781771887991, 2019, https://www.appleacademicpress.com/food-bioactives-functionality-and-applications-in-human-health/9781771887991. |

| **Articoli su riviste** |
|---|

Prakash Kumar Nayak, Chandra mohan Chandrasekar, Shikharpiyom Gogoi, Radha krishnan Kesavan, Impact of thermal and thermosonication treatments of amora (Spondius pinnata) juice and prediction of quality changes using artificial neural networks, Biosystems Engineering, Elsevier, 2022, Impact Factor: 4.123, https://doi.org/10.1016/j.biosystemseng.2022.02.012.

Prakash Kumar Nayak, Chandra Mohan Chandrasekar, Anbarul Haque, Radha Krishnan Kesavan, Influence of pre-treatments on the degradation kinetics of chlorophylls in morisa xak (Amaranthus caudatus) leaves after microwave drying, Journal of Food Process Engineering, Wiley, ID – 13790, 2021, Impact Factor: 2.356, https://doi.org/10.1111/jfpe.13790.

Birhang Basumatary , Prakash Kumar Nayak , Chandra Mohan Chandrasekar , Arup Nath , Mahendra Nayak & Radha Krishnan Kesavan, Impact of thermosonication and pasteurization on the physicochemical, microbiological and anti-oxidant properties of pomelo (Citrus maxima) juice, International Journal of Fruit Science, Taylor and Francis, Vol. 20, S2056 – S2073, 2020, Impact Factor: 1.359, https://doi.org/10.1080/15538362.2020.1848751.

Prakash Kumar Nayak, Chandra Mohan Chandrasekar, Anjelina Sundarsingh, Radha Krishnan Kesavan, Effect of in-vitro digestion on the bio active compounds and biological activities of fruit pomaces, Journal of Food Science and Technology, Springer, Vol. 57, 4707–4715, 2020, Impact Factor: 2.701, https://doi.org/10.1007/s13197-020-04507-1.

Prakash Kumar Nayak, Birhang Basumatary, Chandra Mohan Chandrasekar, Dibyakanta Seth, Radha Krishnan Kesavan, Impact of thermosonication and pasteurization on total phenolic contents, total flavonoid contents, antioxidant activity, and vitamin C levels of elephant apple (Dillenia indica) juice, Journal of Food Process Engineering, Wiley, Vol. 43 (8), ID – 13447, 2020, Impact Factor: 2.356, https://doi.org/10.1111/jfpe.13447.

K. Harini, C. Chandra Mohan, Isolation and characterization of micro and nanocrystalline cellulose fibers from the walnut shell, corncob and sugarcane bagasse, International Journal of Biological Macromolecules, Elsevier, Vol. 163, pp. 1375 – 1383, 2020, Impact Factor: 6.953, https://doi.org/10.1016/j.ijbiomac.2020.07.239.

C. Chandra Mohan, K. Harini, K. Sudharsan, K. Radha Krishnan, and M. Sukumar, Quorum quenching effect and kinetics of active compound from S. aromaticum and C. cassia fused packaging films in shelf life of chicken meat, LWT - Food Science and Technology, Elsevier, Vol. 105, pp. 87 – 102, 2019, Impact Factor: 4.952, https://doi.org/10.1016/j.lwt.2019.01.061.

Sudharsan Kasirajan, Devika Umapathy, Chandra Mohan Chandrasekar, Vajiha Aafrin, Maria Jenitapeter, Lalithapriya Udhyasooriyan, Azhagu Saravana Babu Packirisamy, and Sukumar Muthusamy, Preparation of poly(lactic acid) from Prosopis juliflora and incorporation of chitosan for packaging applications, Journal of Bioscience and Bioengineering, Elsevier, Vol. 128(3), pp. 323-331, 2019, Impact Factor: 2.894, https://doi.org/10.1016/j.jbiosc.2019.02.013.

K. Harini, C. Chandra Mohan, K. Ramya, S. Karthikeyan, and M. Sukumar, Effect of Punica granatum peel extracts on antimicrobial properties in Walnut shell cellulose reinforced Biothermoplastic starch films from cashew nut shells, Carbohydrate Polymers, Elsevier, Vol. 184, pp. 231 – 242, 2018, Impact Factor: 9.381, https://doi.org/10.1016/j.carbpol.2017.12.072.

C. Chandra Mohan, K. Harini, B. Vajiha Aafrin, U. Lalitha priya, P. Maria jenita, S. Babuskin, S. Karthikeyan, K. Sudarshan, V. Renuka, and M. Sukumar, Extraction and characterization of polysaccharides from tamarind seeds, rice mill residue, okra waste and sugarcane bagasse for its Bio-thermoplastic properties, Carbohydrate Polymers, Elsevier, Vol. 186, pp. 394 – 401, 2018, Impact Factor: 9.381, https://doi.org/10.1016/j.carbpol.2018.01.057.

C. Chandra Mohan, K. Harini, S. Karthikeyan, K. Sudharsan, and M. Sukumar, Effect of film constituents and different processing conditions on the properties of starch based thermoplastic films, International Journal of Biological Macromolecules, Elsevier, Vol. 120, pp. 2007 – 2016, 2018, Impact Factor: 6.953, https://doi.org/10.1016/j.ijbiomac.2018.09.161.

P. K. Nayak., C. Chandra Mohan, and K. Radha Krishnan, Effect of thermosonication on the quality attributes of star fruit juice, Journal of Food Process Engineering, Wiley, Vol. 41 (7), pp. e12857,

| |
|---|
| 2018, Impact Factor: 2.356, https://doi.org/10.1111/jfpe.12857. |
| P. K. Nayak., C. Chandra Mohan, and K. Radha Krishnan, Effect of microwave pretreatment on the color degradation kinetics in mustard greens (Brassica juncea), Chemical Engineering Communications, Taylor & Francis, Vol. 205 (9), pp. 1261 – 1273, 2018, Impact Factor: 2.494, https://doi.org/10.1080/00986445.2018.1446003. |
| C. Chandra Mohan, K. Radha krishnan, S. Babuskin, K. Sudharsan, Vajiha Aafrin, U. Lalitha priya, P. Mariyajenita, K. Harini, D. Madhushalini, and M. Sukumar, Active compound diffusivity of particle size reduced S. aromaticum and C. cassia fused starch edible films and the shelf life of mutton (Capra aegagrus hircus) meat, Meat Science, Elsevier, Vol. 128, pp. 47 – 59, 2017, Impact Factor: 5.209, https://doi.org/10.1016/j.meatsci.2017.02.001. |
| Chandran Masi, C. Chandra mohan, and M. Fazil Ahmed, Immobilization of the Magnetic Nanoparticles with Alkaline Protease Enzyme Produced by Enterococcus hirae and Pseudomonas aeruginosa Isolated from Dairy Effluents, Brazilian Archives of Biology And Technology, Instituto de Tecnologia do Paraná (Brazil), Vol. 60, pp. e17160572, 2017, Impact Factor: 0.579, http://dx.doi.org/10.1590/1678-4324-2017160572. |
| C. Chandra mohan, K.R. Rakhavan, K. Sudharsan, K. Radha krishnan, S. Babuskin, and M. Sukumar, Design and characterization of spice fused tamarind starch edible packaging films, LWT - Food Science and Technology, Elsevier, Vol. 68, pp. 642 – 652, 2016, Impact Factor: 4.952, http://dx.doi.org/10.1016/j.lwt.2016.01.004. |
| K. Sudharsan, C. Chandra Mohan, P. Azhagu Saravana Babu, G. Archana, K. Sabina, M. Sivarajan, and M. Sukumar, Production and characterization of cellulose reinforced starch (CRT) films, International Journal of Biological Macromolecules, Elsevier, Vol. 83, pp. 385 – 395, 2016, Impact Factor: 6.953, https://doi.org/10.1016/j.ijbiomac.2015.11.037. |
| Sivarajan Meenatchisundaram, Chandra Mohan Chandrasekar, Lalitha Priya Udayasoorian, Rakhavan Kavindapadi Rajasekaran, Radha Krishnan Kesavan, Babuskin Srinivasan, and Sukumar Muthusamy, Effect of spice-incorporated starch edible film wrapping on shelf life of white shrimps stored at different temperatures, Journal of the Science of Food and Agriculture, Wiley, Vol. 96(12), pp. 4268-4275, 2016, Impact Factor: 3.638, https://doi.org/10.1002/jsfa.7638. |
| C. Chandra Mohan, K.R. Rakhavan, K. Radha Krishnan, S. Babuskin, K. Sudharsan, P. Azhagu Saravana Babu, and M. Sukumar, Development of predictive preservative model for shelf life parameters of beef using response surface methodology, LWT - Food Science and Technology, Elsevier, Vol. 72, pp. 239 – 250, 2016, Impact Factor: 4.952, http://dx.doi.org/10.1016/j.lwt.2016.04.019. |
| Chandra Sekar Chandra Mohan, Rajasekaran Rakhavan Kavindapadi, Kesavan Radha Krishnan, Srinivasan Babuskin, Kasirajan Sudharsan, Pakirisamy Azhagu Saravana Babu, and Muthusamy Sukumar, Impact of S. aromaticum and C. cassia Incorporated Edible Films on Shelf Life of Seer Fish (Scomberomorus guttatus) Stored at Different Temperature Conditions, Journal of Food Processing and Preservation, Wiley, Vol. 41(04), pp. e13096, 2016, Impact Factor: 2.190, https://doi.org/10.1111/jfpp.13096. |
| Chandran Masi, E. Balaji, J. Vigneshwar, C. Chandra mohan, M. Fazil Ahmed, and N. Parthasarathy, Isolation and Production of Proteolytic Enzyme by Bacterial Strains by Using Agrowates as Substrate, Asian Journal of Chemistry, Asian Publication Corporation, Vol. 26 (7), pp. 2182-2184, 2014, Impact Factor: 0.463, http://dx.doi.org/10.14233/ajchem.2014.16394. |
| Shyamali J, Thulasi RM, Chandra mohan C, Chandran M, Muthezhilan R, and Sekar Babu Hariram, Screening the Fungus in Five Selected Cannals of the Cooum River, Research Journal of Pharmaceutical, Biological and Chemical Sciences, RJPBCS, Vol. 3 (2), pp. 769 – 774, 2012, Impact Factor: 0.121. |

ALTRE INFORMAZIONI

**Courses Taught and Other Services Provided to Students and the Institution**

Laboratories courses handled: Food Analysis Laboratory, Advanced Bioprocess Laboratory, Food Processing and Quality Control Laboratory, Food Packaging Laboratory.

Theory courses handled: Food Packaging, Food Chemistry, Food Microbiology, Food Processing and Preservation.

Co-supervision for B.Tech students:

1. Sristi Mundhada [University Registration No: 2015304031] Development of Semipermeable Biodegradable Films for the Preservation of Highly Perishable Food Products, 2019.

2. Saai Sudha. G [University Registration No: 2014304025] and Yeshvanth. M [University Registration No: 2014304037], Development of Active Packaging for Extending Shelf- Life of Food Products, 2018.

Co-supervision for M.Tech students:

1. Karthikeyan. S [University Registration No: 2015412007] Development of Bio - Nano Coated Edible Film for the Preservation of Meat, 2017.

2. Ramya. K [University Registration No: 2016412019] Packaging Film for Extending Shelf Life of Food Products, 2018.

Developed Laboratories in Anna University: Food Packaging Laboratory, Food Analysis Laboratory, and Food 3D Printing Laboratory.

- Have been in-charge of Research equipment procurement committee in Centre for Food Technology, Anna University.

- Have been in Institute of Eminence Committee for Research in Center for Food Technology, Anna University.

- Written several research projects in collaboration with my mentor, among which three research projects were sanctioned.

  - ✓ Metabolic Engineering of Bacillus megaterium for Enhanced Production of D (-) Pantothenic Acid and its Application for the Development of Functional Foods – Funded by DBT.

  - ✓ Industrial Process Development for Meat Preservation by Natural Extracts – Funded by DST-SERB.

Design and Development of Microbial Biopolymers – Funded by UGC.

**Trainings**

1. TMC on chromatographic methods of analysis, Advance training institute, 11th to 15th June, 2012.
2. UGC XII plan short term course on state of art analytical equipment, ANNA UNIVERSITY and UGC, 09th and 10th January 2017.

**Participation in Faculty development programs**

1. Attended and participated in AICTE Training and Learning (ATAL) Academy Online Elementary FDP on " Recent trends in Non-thermal Processing: Prospects and Challenges" from 04/10/2021 to 08/10/2021 at Indian Institute of Food Processing Technology. [5 days]
2. Attended and participated in AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Advances in food and value addition of grains" from 23/08/2021 to 27/08/2021 at Indian Institute of Food Processing Technology. [5 days]
3. Attended and participated in AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Research and Innovation with 3D Printing" from 02/08/2021 to 06/08/2021 at Government College of Technology. [5 days]

**Membership and Activities in Professional Associations**

1. Life time member of International Association of Engineers (IAENG), Membership ID: 195510.
2. Life time member of International Society of Food Engineering (ISFE), Membership ID: 01678.

**Service to Journals**

1. Serving as a regular Reviewer for journal of Carbohydrate Polymers, Carbohydrate Polymer Technologies and Application and other international journals.
2. Serving as an Editorial Board member for International journal of Food Science.

Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del DPR n. 445/2000.

Il presente curriculum, non contiene dati sensibili e dati giudiziari di cui all'art. 4, comma 1, lettere d) ed e) del D.Lgs. 30.6.2003 n. 196.

RICORDIAMO che **i curricula SARANNO RESI PUBBLICI sul sito di Ateneo** e pertanto si prega di non inserire dati sensibili e personali. Il presente modello è già precostruito per soddisfare la necessità di pubblicazione senza dati sensibili.

Si prega pertanto di **NON FIRMARE** il presente modello.

Luogo e data: **Chennai, India, 29-06-2022**