CURRICULAR VITTAE 

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| --- | --- |
| 1. Name | DR. SUNANDA MONDAL |
| 2. Department  3. Date of Joining  4. Designation | BOTANY 01.07.1998 ASSOCIATE PROFESSOR IN BOTANY |

# 5. QUALIFICATIONS:

# 5.a.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Examination Passed | Institution | Board/  Univer-sity | Year of Pass-ing | Subject(s) | Percent-age of Marks | Division/Class |
| B.Sc. | M.U.C. Women’s College, Burdwan | Burdwan University | 1981 | Botany (H)  Zoology & Chemistry (P) | 58.1 | II |
| M.Sc. | Burdwan University | Burdwan University | 1983 | Botany\*\* | 62.0 | 1. I |

5. b. Fellowships:

DST Junior Research Fellowship for the period: 01.11.1985 – 31.10.1988

DST Senior Research Fellowship for the period: 01.11.1988 – 31.10.1989

UGC Senior Research Fellowship for the period: 01.11.1989 – 31.10.1990

5. c.

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| --- | --- |
| Ph. D. | Subject : Microbiology  Title of Dissertation: “Production of Methionine by Microorganisms”.    Registration: Burdwan University  Date of Award: 03.01.1991  Brief Summary /Synopsis of Research/Thesis  As the human population is increasing day by day and the source of animal protein is limited, it will be forced to depend on a vegetable diet in near future and it can be thought therefore that in the coming years amino acids will be necessary for food supplementation to avoid protein energy malnutrition in our country.  At present amino acid production by microbial fermentation is a rapidly expanding branch of industrial microbiology and this potentiality of microbes has been exploited commercially in countries like Japan and USA.  Production of important and essential amino acids through genetically modified bacterial strain and to improve the yield is one of the aims of modern biotechnological research. But unfortunately fermentative production of essential amino acids from bacteria is still in an incipient stage of development in India. The reason for this is the lack of potent strains of microorganisms.  My work was undertaken with a view to make a survey of amino acid producing microorganisms in soil and to isolate cultures potent for production of a sulfur-containing essential amino acid methionine production. In course of this survey five methionine producing organisms were selected for a detailed study. The organisms were identified as members of the genus *Nocardia* and *Brevibacterium.* Optimal conditions for growth and methionine production by these strains were determined using shake flask culture. In order to improve the methionine yield of the best strain *B. heali*, a number of mutants resistant to methionine analogue DL-ethionine, have been isolated. The method of recovery of methionine from the bacteria free culture filtrate was standardized and the purity of the isolated product was tested. |

5. d. Post doctoral Fellowship :

CSIR Research Associate for the period 0 1.11.1992 – 30.11.1997

6. DETAILS OF Orientation Programme/ Refresher Course Attended

* Participated in 28th Orientation Programme on and from 26.10.99 to 22.11.1999 Organised by Academic Staff College, The University of Burdwan.
* Participated in 1st Refresher Course in Life Science on and from 11.8.2004 to 31.8.2004 Organised by Academic Staff College, The University of Burdwan.
* Participated in 10th Refresher Course in Environmental Science on and from 30.8.2005 to 19.9.2005 Organised by Academic Staff College, The University of Burdwan.

7. PRESENT RESEARCH ACTIVITIES (Within 100-150 words): NIL

8. PUBLICATIONS:   13

1. Improvement of L-methionine production by double auxotrophic mutants of*Brevibacterium   heali LT5*

*and LT18.*

Sunanda Mondal, Y.B.Das & S.P.Chatterjee

*Research and Industry* Vol.39, December 1994,pp 239-241

2.  Influence of  cystine on methionine  production by *Nocardia polychromogenes*    and  *Brevibacterium*

*ammoniagenes* .

Sunanda Mondal

*Research and Industry*. Vol.38, June 1993, p.101.

3.   L–Methionine production  by *Nocardia polychromogenes* and *Brevibacterium ammoniagenes* .

Sunanda Mondal, Y.Das, T. K. Samanta , Rina Bhattacharya and S.P. Chatterjee.

*Research and Industry*. Vol.35. March, 1990. pp 11-14.

4.  Threonine Production by Microorganisms : A Review.

Rina Bhattacharyya, Y.Das, T.K.Samanta, S. Mondal, and S.P.Chatterjee.

*Hindustan Antibiotics Bulletin.* Vol.30,No.  3-4,1998. 54-65.

5.  Methionine Production by Microorganisms.

     S.Mondal., Y.B.Das, and S.P.Chatterjee

*Folia Microbiol.* 41(6), 465-472 (1996).

6. L-Threonine Production by Polyauxotrophic mutants of *Arthrobacter globiformis*

     Y.B.Das and S.Mondal.

*Folia Microbiol*.  41 (2),141-145 (1996).

7. Enhancement of Methionine Production by Methionine Analogue Ethionine Resistant mutants of  *Brevibacterium heali*  .

      Mondal, S., Chatterjee,S.P.

*Acta Biotechnol*. 14 (1994) 2, 199-204

8.  L–Methionine Production by Double Auxotrophic Mutants of Ethionine Resistant Strains of

*Brevibacterium heali*  .

       Mondal, S., Das, Y.B.,Chatterjee, S. P.

*Acta Biotechnol*  14 ((1994).1,  61-66

9. L – Lysine Production by Auxotrophic  mutants of *Arthrobacter globiformis*.

Samanta ,T.K.,  Das, Y., Mondal, S., Chatterjee, S.P.

*Acta Biotechnol*  8 (1988 ) 6,  527-533.

PUBLICATIONS:  (In Last five years= 04)

1. Medicinal plants grown in and around Guskara used by local poor people for

treating some common ailments.

Mondal Sunanda\* and Paul Ranjan

*Journal of Medicinal Plants Research* Vol. 5(19), pp. 4798-4803, 23 September, 2011

ISSN 1996-0875 ©2011 *Academic Journals.*

2. Agricultural pesticides (The essential evils) pollution on the flora of river Kunnur, Guskara, Burdwan.

Sunanda Mondal, Kanika Saha and Ranjan Paul

*Impact of pollution: “Assessment and Awareness”*Mondal et al, August, 2014;50-58.

ISBN: 978-81-921083-8-4.

3. Plants perform “Green Clean” from toxic metals.

RANJAN PAULand SUNANDA MONDAL.

National Seminar on “RECENT DEVELOPMENTS in GREEN CHEMISTRY”.

ISBN: 978-93-523-5350-3

4. Proceedings of the Golden Jubilee (1965-2015) Celebration of Gushkara Mahavidyalaya August, 2015;

62-68 with ISBN: 978-93-5235-350-7

9. PAPER PRESENTATION IN CONFERENCES: 09

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name of the Seminar,Conference,  Symposium,Workshop etc. | Name of the sponsoring agency | Place | Date | Title of the Paper |
| 1. 28th Annual Conference and Golden Jubilee Celebrations, AMI . | AMI | Pune | 16.01.1988  to  18.01.1988 | L –Lysine production by  micro-organisms. |
| 1. National Conference on Plants, Microbes & Environment: Issues & Challenges. | UGC | Dept. of Botany,Burdwan University | 20.3.2004  to  21.3. 2004 | Antimicrobial activity of *Ocimum sanctum* & *Scoparia dulcis* |
| 1. National Conference on Current Researches in Plants and Microbial Sciences. | UGC | Dept. of Botany,Burdwan University | 26.11. 2005  to  27. 11.2005 | Plants used for infectious disorders by tribals of Aushgram Block , Burdwan District, West Bengal, India. |
| 4. 4. National Seminar on Medicinal Plants: Aspects and prospects. | UGC | Dept. of Botany,Burdwan University. | 15.03. 2008  to  16. 03.2008 | Medicinal plants used by the aboriginals in Gushkara Subdivision, Burdwan district,West Bengal |
| 1. Golden Jubilee Symposium on Recent Trends in Contemporary Plant and Microbial Sciences. | UGC | UGC Centre of Advanced Study  Dept. of Botany, Burdwan University | 19.03.2010  to  20.03.2010 | Medicinal plants used by local poor people of Gushkara for treating Osteoporosis. |
| 1. State Level Seminar on “BIO-DIVERSITY: ISSUES AND CONCERNS” | UGC | Gushkara Mahavidyalaya, Dept. of Botany, Gushkara,Burdwan | 27.03.2010 | **Non-Timber forest products in use by the Tribal of Burdwan District, West Bengal.**  L.N. Manna and S. Mondal |
| 1. State Level Seminar on “BIO-DIVERSITY: ISSUES AND CONCERNS” | UGC | Gushkara Mahavidyalaya, Dept. of Botany, Gushkara, Burdwan | 27.03.2010 | Osteoporosis and Medicinal Plants. L.N. Manna and S. Mondal |
| 1. Impact of Pollution : Assesment and awareness. | DST | Department of Zoology, Hooghly Women’s College, Pipulpati, Hooghly. | 14.02.2014  to  15.02.2014 | Agricultural pesticides (The essential evils) pollution on the flora of river Kunnur, Guskara, Burdwan. |
| 1. National Seminar on “RECENT DEVELOPMENTS in GREEN CHEMISTRY”. | UGC | Gushkara Mahavidyalaya, Dept. of Chemistry, Gushkara, Burdwan | 22.03.2015 | Plants perform “Green Clean” from toxic metals. |

#### 10. Seminars /Conference/Retraining Attended :14

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| --- | --- | --- | --- |
| Name of the Seminar,Conference,  Retraining etc. | Name of the sponsoring agency | Place | Date |
| 1 Seminar on Rural Development: Problem, Policies & Prescriptions of Prof. Amartya Sen | UGC | Guskara Mahavidyalaya | 8.3.2000 |
| 2. Seminar on Women Empowerment | UGC | Guskara Mahavidyalaya | 30.3.2002 |
| 3. National Conference on Plants, Microbes & Environment: Issues & Challenges. | UGC | Dept. of Botany,Burdwan University | 20.3.2004 &  21.03. 2004 |
| 4. Seminar on Empowerment of Women | UGC | MUC Women’s College, Burdwan | 24.2.2005 &  25.2.2005 |
| 5. Retraining of College Teachers | UGC | Jadavpur University, Kolkata | 10.3.2006 |
| 6. National Seminar on Environment & Sustainable Development –The Indian Context | UGC | Banwarilal Bhalotia College, Asansol, West Bengal | 09.03.07  to 10.03.07 |
| 7. International Seminar on The Role of Women In Islam. | UGC | Burdwan Raj College, Burdwan, West Bengal. | 12.04.2007 |
| 1. UGC Sponsored National Level Seminar on Challenges of the Indigenous Cultures in the face of Globalisation | UGC | Netaji Mahavidyalaya, Arambagh, Hooghly | 08.04.08  &  09.04.08 |
| 1. One day Seminar on “Education: past and Pesent” | Departmental Seminar | Gushkara mahavidyalaya, Gushkara, Burdwan. | 25.09.2008 |
| 1. National Level Seminar on “Recent Advances in Genetics & Molecular Biology, Biotechnology and Bioinformetics. | UGC | Vidyasagar College, Kolkata. | 21.11.2008 &  22.11.2008 |
| 1. National Conference on Biodiversity: Threats & Conservation. | DST | Serampore College, Serampore, Hooghly. | 13.02.2009  &  14.02.2009 |
| 1. Science & Technology Congress | DST | Burdwan University | 28.02.2009  &  01.03.2009 |
| 1. National Seminar on “Women & Society in Colonial India: Debates and Discourses | UGC | MUC Women’s College, Burdwan | 29.11.2011  &  30.11.2011 |
| 1. National Seminar on “ Challenges of Biology in the 21st Century | UGC | MUC Women’s College, Burdwan | 01.12.2011  &  02.12.2011 |

11. Symposia/Workshop Attended: 06

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| Name of the  Symposium,Workshop etc. | Name of the sponsoring agency | Place | Date |
| 1. Symposia on HIV/AIDS, Education & Healthy life style | Ministry of Human  Resource Development,  Govt. of India | Guskara Mahavidyalaya, NSS Unit | 13.3.1999 to 14.3.1999 |
| 2. One Day Workshop on Environmental Studies | Burdwan University | Burdwan Science Centre | 29.7.2000 |
| 3. Symposium on “Einstein and Theory of Relativity: Commemorating a Genius” to celebrate International Year of Physics (2005) | Science and Technology Council Department, Govt. of West Bengal | Guskara Mahavidyalaya | 26.11.2005 |
| 4. One Day Workshop on Biodiversity of Burdwan District | West Bengal Bio-Diversity Board | MUC Women’s College, Burdwan | 12.4.06 |
| 1. One Day State Level Workshop on Statistical Methods for Students of Biological and Social Sciences. | UGC | Vivekananda Mahavidyalaya, Burdwan, West Bengal. | 07.02.2008 |
| 6. Workshop on Molecular Biological Techniques | Higher Education Department, Govt. of West Bengal | Department of Zoology, Burdwan University | 16.04.2008 to 18.04.2008 |

1. Conferences, Symposium, Seminars, Workshops. etc. organized by the department:
2. Organised a Seminar on “ORIGIN OF LIFE” in the Department of Botany, Guskara Mahvidyalaya on 3.3.2005.
3. Organised a Seminar on ‘PLANT PATHOLOGY’ in the Botany Department of Botany, Guskara Mahavidyalaya on 19.03.2007.
4. Organised a UGC sponsored State Level Seminar on “BIO-DIVERSITY: ISSUES AND CONCERNS” in the Department of Botany, Guskara Mahvidyalaya on 27.3.2010.
5. Organised a Seminar on “HERBAL CURE: A NEED OF THE HOUR” in the Department of Botany, Guskara Mahvidyalaya on 21.04.2015 under UGC Plan Block Grant (PBG) XII Plan.

13. Details of ongoing projects and its total outlay: NIL

14. Project completed : ONE

i) Title of the project : Microbial activity of some medicinal plants.

ii) Name of the funding agency : U.G.C.

iii) Duration : 01.08.2001 to 31.07.2003 (two years) .

15. Consultancy and extension services and revenue generated:

* Member, GB, Keshabgunge Poura Prathamik Vidyalaya.
* Acted as Member, team of Judges in Science Quiz and Elocution Competitions held at Kamarpara High School on 17th and 18th January 2005 to commemorate International Year of Physics (2005).
* Acted as Member, Team of Judges, Block Level Science Seminar on “Remote Sensing and Its Applications” held at Ausgram Block II office on 20.08.02

1. Details of inventions and patent:
2. Researech Guidence offered: Dr. S. Mondal recognized as a Research Supervisor By the University

of Burdwan on 2015.

1. Publication of books: ONE
2. Members of learned / educational societies:

* Member, Association of Microbiologists of India (AMI)
* Member, Pashchimbanga Bigyan Mancha
* Vice President, Student Health Centre.

1. Participation in College Affairs:

* Member, Governing Body (11/2012 to 12/2015)
* Convener, Service Book Sub-committee. (2013- continuing till date)
* Convener, Routine Sub-committee.(2013-continuing till date)
* Coordinator, Bigyan Mela (2015)
* Jt. Secretary, Golden Jubilee Sub- Committee (2014-2015)
* Member, Finance Sub-Committee (11/2012 to 12/2015)
* Member, Stipend Sub-Committee(2013- continuing till date)
* Member, Tender and Purchase Sub-committee. (2013-2015)
* Member, UGC Planning Committee (2016)
* Member, IQAC Sub-Committee. (2014- continuing till date)
* Member, NAAC Stirring Committee. (2013-2015)
* Member, Academic Subcommittee. (2012- continuing till date)

1. Appointed as Chairman, Paper Setter, Moderator, External, Internal (Theoretical & Practical)

Examinerof Botany & Microbiology (both) by Burdwan University.