CURRICULUM VITAE

Anal Kant Jha, M.Sc., M.Phil. (Cantab), Ph.D., FCCS (Cambridge, U.K.)

Married Indian Male
Born on 16th July, 1965.

Current Address for Correspondence:
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Present Employment (08/2013):
Working as Assistant Professor in Aryabhatta Centre forNanoscience and Nanotechnology, Aryabhatta Knowledge University, Patna.

Work Experience after Education:

March 2003- September 2013.
Research Collaborator, Nanomaterials Laboratory, University Department of Physics, in the area of Nanobiotechnology, T.M. Bhagalpur University, Bhagalpur, India.

11/2002 - 7/2009.
Worked as visiting faculty member (*Lecturer*) in the Department of Biotechnology, Marwari College, T.M. Bhagalpur University, Bhagalpur, India.

University Education:

Ph.D. in Plant Biochemistry (Botany) from the University Department of Botany, T.M. Bhagalpur University, Bhagalpur, India (April, 1993).
Dissertation: "Morphological and Biochemical evaluation of certain varieties of Chilli (*Capasicum annum* L.) of North-East Bihar with special reference to Ascorbic Acid, Capsaicin and Capsanthin".**(Publications:06)**

M.Phil. in Biochemistry from the Department of Biochemistry, University of Cambridge, U.K. (January, 1991).
Dissertation: An NMR microscopic Study of Germinating Castor beans.**(Publication:01)**

M.Sc. (Botany) with a Specialization in Plant Physiology and Biochemistry from the University Department of Botany, T.M. Bhagalpur University, India. (September, 1988).

B.Sc.(H) in Botany from T.N.B. College, T.M. Bhagalpur University, Bhagalpur, India. (September, 1985).

Specialized Experience/Research Interests:

- **Basic techniques of Biochemistry & Molecular Biology:** TLC and Paper chromatography, Colorimetry, Spectrophotometry, Solvent extraction. I have learnt these techniques during my M.Sc. practical course and have applied them during my Ph.D. and afterwards (1985-1993)**[publications: 08].**

- **Plant tissue culture:** Somatic embryogenesis, Biolistic treatment mediated plant transformation, Preliminary knowledge regarding Agrobacterium mediated gene transfer.I had learnt these techniques during short course in Plant Molecular Biology at Wye College, Ashford(Now Imperial College at Wye) and had applied during my Research Associate-ship at JNU, New Delhi. (2001-2002).

- **Microbes, plant, fruit, expired medicine, domestic wastes and lower/higher animal waste extract/broth mediated synthesis of metallic, oxide**and**sulfide nanoparticles.(2003-)**
  Inspired by the earlier works on *Lactobacilli*, I had developed a series of novel protocols for synthesis of different types of Nanomaterials. We commenced with *Lactobacilli* (a benign prokaryote) and then Yeast followed by plant parts, fruit juice, expired medicines, kitchen wastes, dead lower animals and higher animal processing wastes to synthesize a variety of nanomaterials. Here, I should emphasise that we are the pioneers in utilizing lower animal species and the processing wastes of higher animals like fishes and goat. Along with this, we have also pioneered the utilization of expired medicines for synthesis of nanomaterials.
  (Publications:49)

- **Food Nanobiotechnology.(2009-)**
  We have developed some novel techniques to clarify the fruit juice utilizing biologically acceptable nanomaterials. The protocol is currently under optimization. We are also working on use of such nanomaterials in packaging in order to enhance the shelf life foods and beverages.

- **Embryonic Stem cells and Molecular Nanomedicine.(2014-)**
  Quite recently, I have started working in this area with an aim to develop stem cells having coating of therapeutically significant nanoparticleslike Gold or Platinum which could be effective in diagnosis or treatment of Cancer. My efforts in that direction areon.Similar effort can be taken for progressive cataract or a potentially damaged liver or kidney.
  (Publications:02)

Relevant professional activities:

- Working on **Nano-based Online Water Filter** in order to eliminate the foul odour, hardness and salinity.
- Working on Nanomaterials based anti-termites and light weight medicated bullet proof jackets.
- **Refereed papers (Peer)** for Applied and Environmental Microbiology (American Society of Microbiology, USA), Journal of Inorganic and Organometallic Polymers and Material (Springer) and Current Nanoscience (Bentham Press, USA), Biotechnology Research International (Hindawi Publishing Corporation, USA), Colloids and Surfaces B: Biointerfaces (Elsevier). J. Applied Biomedicine (Elsevier), Biocatalysis and Agricultural Biotechnology (Elsevier), J. Mat. Environsci.(Morocco).

Awards, Honours, Distinctions *etc.*:

- Awarded ODA Cambridge Scholarship (to do M. Phil. in Biochemistry) from the Cambridge Commonwealth Trust, University of Cambridge, U.K. in June 1989.

- A major portion of M.Phil. Work was presented at the Royal Society Discussion meeting on NMR Imaging in June 1990 which subsequently got published in the ***Philosophical Transactions*** **of the Royal Society, London.**

- **Only Asian selected to register for attending a short course on advanced techniques of Plant Molecular Biology by the Wye College (Now Imperial College at Wye, U.K.) in July 1994.**

- **Panel member of Research Associates of the National Research Council of Canada (1993-1995).**

- Placed sixth in the University merit list in B.Sc. (H) examination.

- First class academic career all through (*i.e.* from Matriculation to M.Sc.)

Fellowships: Elected Fellow of the Cambridge Commonwealth Society **(FCCS)** at Trinity College, University of Cambridge, U.K. in May 1990 for availing a Cambridge Scholarship.

Conferences, Seminars and Symposia:

- Attended and Co-Chaired Technical Session in International Conference on Nanotechnology and Innovations (ICN:3 I-2017) at IIT, Roorkee on 6.12.2017.

- Attended *Demonstration and awareness programme on 3D printing*organised by State Innovation Council, Department of Planning, Govt. of Bihar atBirla Institute of Technology, Patna on May 05, 2014.

- Presented a paper in *International Conference on Functional Materials-2014*atIndian Institute of Technology, Kharagpur (WB) from Feb. 05 – 07, 2014.

- Delivered a lecture in National Seminar on "Emerging Trends in Condensed Matter Physics-2013" organizedbyUniversity Department of Physics, T.M.B.U., Bhagalpur during 17th-18thJan. 2014.

- Participated in "DST-Lockheed Martin India Innovation Growth Programme 2013 Technology Expo" organizedbyFICCIon 8thJan. 2014.

- Participated in "Launching of the website 'SAHYOG BIHAR' and followed by discussion meeting" organizedbyDepartment of Planning, Govt. of Bihar on 8thJan. 2014.

- Participated in "DST-Lockheed Martin India Innovation Growth Programme 2013 Technology Expo" organizedbyFICCIon 5thDec. 2013.

- Participated in Discussion meeting on "The Millennium Alliance" organized byFICCI& USAIDon23rdOct. 2013.

- Presented a paper in Condensed Matter Days 2009 (CMD-09) at Jadavpur University, Jadavpur, Kolkata, India, from Aug. 26 – 28, 2009.

- Presented a paper on Synthesis of metallic and oxide nanoparticles – A sustainable green approach in 2nd Bangalore Nano (Dec. 11-13), 2008 organized by JNCASR, Bangalore India.

- Presented a paper on microbe assisted nano-transformation in National Conference on Recent trends in Condensed Matter Physics (March 28-29), 2007 organized in the University Department of Physics, T.M. Bhagalpur University, India.

- Attended International symposium on **spatially determined NMR at Cambridge, U.K. in December, 1989.**

- **Attended Royal Society Discussion Meeting on NMR Imaging at the Royal Society, London in June 1990.**

Invited Lectures:

- Delivered an invited lecture in the International Conference on Nanotechnology and Innovations (ICN:3 I-2017) at IIT, Roorkee on 7.12.2017.

- Delivered an invited lecture in the National Seminar on Sustainable Agriculture and Bio-pesticides at S.M. College, Bhagalpur on 12.11.2016.

- Delivered an invited lecture in the first Executive Committee meeting of the Bihar State Innovation Council on 7.01.2016.

- Delivered an invited lecture in a National Seminar on Chemistry and Sustainable Development atNaugachia, Bhagalpur, India, on 23.9.2015.

- Delivered an invited lecture at Vardhmaan Institute of Medical Sciences(VIMS), Pawapuri, Nalanda, India on 16.9.2015.

- Delivered an invited Platinum Jubilee lecture in Patna Women's College on "Nanoscience: Possibilities and Challenges" organized by the Department of Physics,Patna Women's College, Patnaon 22.08.2015.

- Delivered an Invited talk in National Seminar on Unleashing Innovations during Sept. 20-21, 2013 at Patliputra Ashok, Patna.

- Delivered 2nd Foundation Day Invited Lecture on Jan. 19, 2013 at Vidyadaan Institute of Technology &Management(VITM), Buxar, India.

- Delivered an invited lecture in a National Seminar on Green Chemistry at Naugachia, Bhagalpur, India, on 24.9.2011.

- Delivered a lecture on MRI, NMR Microscopy and Plant Systems at the IIT, Roorkee, India. On 6.2.2005.

Workshop/short Course/Specialized Training:

- Attended a basic course on Animal and Stem Cell Culture Techniques at IAB Sciences, Kurukshetra from Nov. 20th to Dec. 23rd2014.

- Attended International Workshop on Biomedical MR at the A.I.I.M.S., New Delhi from January 12-15, 2005.

- Attended National Workshop on Phytochemical Techniques and Plant Tissue Culture at CAS in Botany, University of Madras, Chennai from January 19-23, 2005.

- National Workshop on Radiochemistry and applications of Radio-isotopes (sponsored and conducted by the Scientists from the BARC, Mumbai) at Sahibganj College, Sahibganj, Jharkhand, India in March 1998.

- Attended a short course on advanced techniques of Plant Molecular Biology by the Wye College (Now Imperial College at Wye, Wye-Ashford, U.K.) in July 1994.

Technical consultancy:

- Techsol International, Ranchi, India
- IAB Sciences, Kurukshetra, India.
- Medwell India, New Delhi.

Technology developed:

- Fabrication of nanomaterials based multipurpose face masks and indelible ink and 17 green nanomaterials synthesis protocols.
- Nanomaterial based multipurpose skin care lotion (effective against herpes attacks, burn injuries, deep cuts, bed soar, nailKeratosis, fungal dermatitis and Psoriasis, *etc.*).
- Nanomaterial Based Sanitizer/De-odourizer for general sanitation of toilets and domestic wastes.
- Nanomaterial based Medicated Foot freshening Spray.

Research guidance

- **No. of masters' students:**
  - **Completed:** 03
  - **Ongoing:** 03

- **No. of Ph.D. students:**
  - **Completed:** NIL
  - **Ongoing:** **04**

Referees:

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List of Publications:

I. Chapters for Book:

Ch.Title : **Understanding biosynthesis of metallic/oxide nanoparticles: A biochemical perspective**
Book Title : Biocompatible Nanomaterials Synthesis, Characterization and Applications
Author : **Anal K. Jha** andK. Prasad
Publisher : *NOVA Sci. Publn., USA*.(**2010**), Chap. 2, pp 23-40, **ISBN: 978-1-61668-677-2**
Editors : S. Ashok Kumar, S. Thiagarajan and Sea-Fue Wang

Ch.Title : **Understanding the involved mechanisms in plant mediated synthesis of nanoparticles**
Book Title : Green Biosynthesis of Nanoparticles - Mechanisms and Applications
Author : **Anal K. Jha** andK. Prasad
Publisher : *CABI Publ., UK*. (**2012**), Chap. 8, pp 124-133, **ISBN: 978-1-78064-223-9**
Editor : MahendraRai and C. Posten

Ch.Title : **Understanding mechanism of fungus mediated nanosynthesis: A molecular approach**
Book Title : Advances and ApplicationsThrough Fungal Nanobiotechnology
Author : **Anal K. Jha** andK. Prasad**DOI: 10.1007/978-3-319-42990-8_1**
Publisher : *Springer, Switzerland*. (**2016**), Chap. 1, pp 1-23, **ISBN: 978-3-319-42990-8**
Editor : Ram Prasad

Ch.Title : **Fungal Nanotechnology: A Pandora to Agricultural Science and Engineering**
Book Title : Fungal Nanotechnology-Applications in Agriculture, Industry and Medicine
Author : Mugdha Rao, Babita Jha,**Anal K. Jha** andK. Prasad
Publisher : *Springer, Switzerland*. (**2017**), *in print*
Editor : Ram Prasad

Ch.Title : **Fungal Nanotechnology and Biomedicine**
Book Title : Fungal Nanotechnology-Applications in Agriculture, Industry and Medicine
Author : Niraj Kumari,**Anal K. Jha** andK. Prasad
Publisher : *Springer, Switzerland*. (**2017**), *in print*
Editor : Ram Prasad

Ch.Title :**Biosynthetic methods for inorganic nanoparticles: Nature's silent pursuit**
Book Title : Encyclopaedia of Nanoscience and Nanotechnology.
Author :**Anal K. Jha**andK. Prasad
Publisher : *American Scientific Publishers USA*. (**2017**), *in print*
Editor : Hari Singh Nalwa.

II. Powder Diffraction File (International Centre for Diffraction Data, USA):

Silver iron Titanium oxide ($Ag_{1/2}Fe_{1/2}$)TiO_3, 2015.

III. Research Publications (*in International & National Journals*):

- **Nanoscience& Nanotechnology**

1 *Punica granatum* Fabricated Platinum Nanoparticles: A Therapeutic Pill for Breast Cancer, BabitaJha, MugdhaRao, A. Chattopadhyay, A. Bandyopadhyay, K. Prasad and**Anal K. Jha**, *AIP Conference Proceedings,* (2017) *accepted*.

2 Enhanced Antimicrobial Activity in Biosynthesized ZnO Nanoparticles, NirajKumari, PritiKumari, **Anal K. Jha** and K. Prasad, *AIP Conference Proceedings,* (2017) *accepted*.

3 *Nyctanthes arbortristis* Mediated Synthesis of Silver Nanoparticles: Cytotoxicity Assay Against THP-1 Human Leukemia Cell Lines, PritiKumari, NirajKumari, **Anal K. Jha**, K.P. Singh and K. Prasad, *AIP Conference Proceedings,* (2017) *accepted*.

4 Silver Nanoparticles Added PVDF/ZnO Nanocomposites: Synthesis and Characterization, Utpal Singh, NirajKumari, **Anal K. Jha**, K.P. Chandra, JayantKolte, A.R. Kulkarni and K. Prasad, *AIP Conference Proceedings,* (2017) *accepted*.

5 Electrical Conduction in PVDF/ZnO-Ag Nanocomposites, Utpal Singh, **Anal K. Jha**, K.P. Chandra, JayantKolte, A.R. Kulkarni and K. Prasad, *AIP Conference Proceedings,* (2017) *accepted*.

6 Nanoparticles from kitchen waste (Orange peels): An avenue for conversion of green waste to value added product. MugdhaRao, BabitaJha and **Anal Kant Jha**, *Vegetos*, 30 (Supplement) 2017. DOI: 10.5958/2229-4473.2017.00168.9

7 Evaluation of Antimicrobial Activity of Silver Nanoparticles Synthesized from *Piper betle* Leaves Against Human and Plant Pathogens. BabitaJha, MugdhaRao, K. Prasad and **Anal K. Jha**. *AIP Conference Proceedings,* (2017) *accepted*.

8 Now the household mosquitoes (*Culex* Sp.) synthesize CdS nanoparticles!,**Anal K. Jha** andK. Prasad, *Journal of the Chinese Advanced Materials Society*,***4***(2) (2016) online.
DOI:10.1080/ 22243682.2016.1160256.

9 Lead-free perovskite ($Fe_{1/2}Ag_{1/2}$)TiO_3nanoceramic: Synthesis and characterization, Naveen Kumar, Nitendra Kumar, S. Kumar, **Anal K. Jha** andK. Prasad, *Journal of Bioelectronics and Nanotechnology*,***1***(1) (2016) 1-6.

10 Platinum nanoparticles: Biosynthesis and activity on SiHa cervical cancer cell line, **Anal K. Jha** andK. Prasad, *Indian Journal of Biotechnology*, (2016) accepted.

11 Green synthesis and antimicrobial activity of silver nanoparticles onto cotton fabrics: An amenable option for textile industries, **Anal K. Jha** andK. Prasad, *Advanced Materials Letters*, *7*(1) (2016) 42-46.
DOI:10.5185/amlett.2016.6083. **ISSN: 0976-3961**

12 Aquatic fern (*Azolla* sp.) assisted synthesis of gold nanoparticles, **Anal K. Jha** andK. Prasad, *International Journal of Nanoscience*, ***15***(1&2) (2016) 1650008-1650012.
DOI:10.1142/S0219581X16500083.

13 Synthesis of ZnO nanoparticles from goat slaughter waste for environmental protection, **Anal K. Jha** andK. Prasad, *International Journal of Current Engineering and Technology*, ***6***(1) (2016) 147-151.
DOI:10.14741/Ijcet/22774106/6.612016.26. **ISSN: 2347-5161**

14 Facile green synthesis of metal and oxide nanoparticles using Papaya juice, **Anal K. Jha** andK. Prasad, *Journal of Bionanosciences*, ***9***(4) (2015) 311–314.
DOI:10.1166/jbns.2015.1302**. ISSN: 1557-7910**

15 Green synthesis and characterization of $(Ag_{1/2}Al_{1/2})TiO_3$nanoceramics, S. Kumar, **Anal K. Jha** andK. Prasad, *Materials Science – Poland*, ***33***(1) (2015) 59-72.
DOI:10.1515/msp-2015-0006**. ISSN: 2083-1331**

16 Green synthesis of silver nanoparticles and its activity on SiHa cervical cancer cell line, **Anal K. Jha** andK. Prasad, *Advanced Materials Letters*, ***5***(9) (2014) 501-505.
DOI:10.5185/amlett.2014.4563. **ISSN: 0976-3961**

17 Green synthesis and characterization of $BaFe_{0.5}Nb_{0.5}O_3$ nanoparticles, **Anal K. Jha** andK. Prasad, *Journal of the Chinese Advanced Materials Society*, ***2***(4) (2014) 294-302.
DOI:10.1080/22243682.2014.941931.

18 Synthesis of silver nanoparticles employing fish processing discard: An eco-amenable approach,**Anal K. Jha** andK. Prasad, *Journal of the Chinese Advanced Materials Society*, ***2***(3) (2014) 179-185.
DOI:10.1080/22243682.2014.930796.

19 Synthesis of $(Ag_{0.5}Fe_{0.5})TiO_3$nanocrystalline powders using stearic acid gel method, S. Kumar, L.K. Sahay, **Anal K. Jha** andK. Prasad, *Advanced Materials Letters*,***5***(2)(2014) 67-70.
DOI:10.5185/amlett.2013.fdm.06. **ISSN: 0976-3961**

20 Synthesis and characterization of nanocrystalline $Al_{0.5}Ag_{0.5}TiO_3$ powder, S. Kumar, L.K. Sahay, **Anal K. Jha** andK. Prasad, *Advances in Nano Research*,***1***(4) (2013) 211-218.
DOI:10.12989/anr.2013.1.4.211.**ISSN: 2287-237X**

21 Rose (*Rosa sp*.) petals assisted green synthesis of gold nanoparticles, **Anal K. Jha** andK. Prasad, *Journal of Bionanosciences*, **7**(3)(2013) 245-250.
DOI:10.1166/jbns.2013.1139. **ISSN: 1557-7910**

22 Can animals too negotiate nanotransformations?,**Anal K. Jha** andK. Prasad, *Advances in Nano Research*,***1***(1)(2013) 35-42.
DOI:10.12989/anr.2013.1.1.035.**ISSN: 2287-237X**
This article was nominated for Ig Nobel Prize 2013.

23 Carbon coated alumina nanoparticles: A green option for water purification, **Anal K. Jha** andK. Prasad, *Journal of Bionanoscience*, ***6***(1) (2012) 33-38.
DOI:10.1166/jbns.2012.1071. **ISSN: 1557-7910**

24 Banana fly (*Drosophila* Sp.) synthesizes CdSnanoparticles!,**Anal K. Jha** andK. Prasad, *Journal of Bionanoscience*, ***6***(2) (2012) 99-103.
DOI:10.1166/jbns.2012.1076. **ISSN: 1557-7910**

25 Biological synthesis of cobalt ferrite nanoparticles, **Anal K. Jha** andK. Prasad, *NanotechnologyDevelopment*, ***2*:e9** (2012) 46-51.
DOI: 10.4081/nd.2012.e9.**ISSN: 2038-968X**

26 Synthesis of nanomaterials using expiry medicine: An eco-benign option, **Anal K. Jha** andK. Prasad, *NanotechnologyDevelopment*, ***2*:e7** (2012) 36-39.

DOI:10.4081/nd.2012.e7.**ISSN: 2038-968X**

27 PbS nanoparticles: biosynthesis and characterization, **Anal K. Jha** andK. Prasad**,** *International Journal of Nanoparticles*, ***5***(4) (2012) 369-379.
DOI: 10.1504/IJNP.2012.049914.**ISSN: 1753-2507**

28 Biosynthesis of gold nanoparticles using common aromatic plants, **Anal K. Jha** andK. Prasad, *International Journal of Green Nanotechnology: Physics & Chemistry*, ***4***(3) (2012) 219-224.
DOI:10.1080/19430892.2012.706070.**ISSN: 1943-0892**

29 Biosynthesis of metal and oxide nanoparticles using orange juice, **Anal K. Jha**, V. Kumar and K. Prasad, *Journal of Bionanoscience*, ***5***(2) (2011) 162-166.
DOI: 10.1166/jbns.2011.1053.**ISSN: 1557-7910**

30 Green fruit of chili(*Capsicum annum* L.) synthesizes nanosilver!,**Anal K. Jha** andK. Prasad, *Digest Journal of Nanomaterials and Biostructure*, ***6***(4) (2011) 1717-1723.
ISSN: 1842-3582

31 Biosynthesis of gold nanoparticles using bael (*Aeglemarmelos*) leaf: Mythology met technology, **Anal K. Jha** andK. Prasad, *International Journal of Green Nanotechnology: Physics & Chemistry*, ***3***(2) (2011) 92-97.
DOI:10.1080/19430892.2011.574560.**ISSN: 1943-0876**

32 Ferroelectric $BaTiO_3$ nanoparticles: biosynthesis and characterization, **Anal K. Jha** andK. Prasad, *Colloids and Surfaces B: Biointerfaces*, ***75***(1) (2010) 330-334.
DOI: 10.1016/j.colsurfb.2009.09.005.**ISSN: 0927-7765**

33 Synthesis of $BaTiO_3$ nanoparticles: A new sustainable green approach, **Anal K. Jha** andK. Prasad, *Integrated Ferroelectrics*,***117***(1) (2010) 49-54.
DOI:10.1080/10584587.2010.489422. **ISSN: 1058-4587**

34 Biosynthesis of CdS nanoparticles: An improved green and rapid procedure, K. Prasad and **Anal K. Jha**, *Journal of Colloid and Interface Science*, ***342***(1) (2010) 68-72.
DOI:10.1016/j.jcis.2009.10.003. **ISSN: 0021-9797**
This article was selected as **TOP CITED ARTICLES** (2010-2011) by *Journal of Colloid and Interface Science*.

35 Biosynthesis of metal and oxide nanoparticles using Lactobacilli from yoghurt and probiotic spore tablets, **Anal K. Jha** andK. Prasad, Biotechnology Journal, **5**(3) (2010) 285-291.
DOI:10.1002/biot.200900221.**ISSN: 1860-6768**

36 Probiotic *Lactobacillus* adds WO_3in its nanomenu!,K. Prasad, **Anal K. Jha** and A.R. Kulkarni, *Journal of Bionanoscience*, ***4***(1-2) (2010) 99-103.
DOI:10.1166/jbns.2010.1023. **ISSN: 1557-7910**

37 Synthesis of Gd_2O_3 nanoparticles using *Lactobacillus* sp.: a novel green approach, **Anal K. Jha** and K. Prasadand A. R. Kulkarni, *International Journal of Green Nanotechnology*: *Physics & Chemistry,* ***2***(2) (2010) P31-P38.
DOI:10.1080/19430876.2010.532411.**ISSN: 1943-0876**

38 Green synthesis of silver nanoparticles using *Cycas* leaf, **Anal K. Jha** andK. Prasad, *International Journal of Green Nanotechnology*: *Physics and Chemistry,****1***(2) (2010) P110-P117.
DOI:10.1080/19430871003684572. **ISSN: 1943-0876**

39 Can microbes mediate nano-transformation?,K. Prasad, **Anal K. Jha**, K. Prasad and A.R. Kulkarni, *Indian Journal of Physics*, ***84***(10) (2010) 1355-1360.
DOI: 10.1007/s12648-010-0126-8**. ISSN: 0973-1458**

40 Plant system: Nature's nanofactory, Anal K. Jha, **K. Prasad**, K. Prasad and A.R. Kulkarni, Colloids and Surfaces B: Biointerfaces, ***73***(2) (2009) 219-223.
DOI: 10.1016/j.colsurfb.2009.05.018. **ISSN: 0927-7765**

41 Synthesis of TiO_2 nanoparticles using microorganisms, Anal K. Jha, **K. Prasad** and A.R. Kulkarni, *Colloids and Surfaces B: Biointerfaces*,***71***(2)(2009) 226-229.
DOI: 10.1016/j.colsurfb.2009.02.007. **ISSN: 0927-7765**
This article was selected as **TOP 25 HOTEST ARTICLES** of 2009 by *Colloids and Surfaces* B: *Biointerfaces*

42 Biosynthesis of Sb_2O_3 Nanoparticles: A Low Cost Green Approach, **Anal K. Jha**, K. Prasad and K. Prasad, *Biotechnology Journal*, ***4***(11) (2009) 1582-1585.
DOI: 10.1002/biot.200900144. **ISSN: 1860-6768**

43 ZnO nanoparticles: synthesis and adsorption study, K. Prasadand**Anal K. Jha**, *Natural Science*,***1***(2) (2009) 129-135.
DOI:10.4236/ns.2009.12016. **ISSN: 2150-4105**

44 A green low-cost biosynthesis of Sb_2O_3 nanoparticles, **Anal K. Jha**, K. Prasad and K. Prasad, *Biochemical Engineering Journal*, ***43***(3) (2009) 303-306.
DOI:10.1016/j.bej.2008.10.016. **ISSN: 1369-703X**

45 Biosynthesis of silver nanoparticles using *Eclipta* leaf, **Anal K. Jha**, K. Prasad, Vikash Kumar and K. Prasad,*Biotechnology Progress*, ***25***(5) (2009) 1476-1479.
DOI:10.1002/btpr.233. **ISSN: 1520-6033**

46 Yeast mediated synthesis of silver nanoparticles, **Anal K. Jha**,K. Prasadand A.R. Kulkarni, *International Journal of Nanoscience& Nanotechnology*, ***4***(1) (2008) 17-21.
ISSN: 1735-7004

47 Synthesis of nickel nanoparticles: bioreduction method, **Anal K. Jha**, K. Prasadand A.R. Kulkarni, *Nanoscience& Nanotechnology: An Indian Journal*, ***2***(2-3) (2008) 26-29.
ISSN: 0974-7494

48 Microbe mediated nano transformation: Cadmium, **Anal K. Jha**, K. Prasadand A.R. Kulkarni, *NANO: Brief Reports & Reviews*, ***2***(4) (2007) 239-242.
DOI:10.1142/S1793292007000611. **ISSN: 1793-7094**

49 *Lactobacillus* assisted synthesis of titanium nanoparticles, K. Prasad, **Anal K. Jha** and A.R. Kulkarni, *Nanoscale Research Letters*, ***2***(5) (2007) 248-250.
DOI:10.1007/s11671-007-9060-x. **ISSN: 1931-7573**

Other fields:

1. Isolation, Culturing and Cryopreservation of Putative Granulosa Stem Cells from Buffalo Ovaries Sesha Subramanian, Aarti Raj, Rajesh Kumar, Satish Kumar Rana, **Anal K.Jha**andSanjeevGautam,*International Journal of Cell Science and Biotechnology*, **4**,20-25 (2015).

2. Expression of transcription factor genes (*Oct*-4, *Nanog and Sox 2*) by putative amniotic fluid stem (AFS) cells of sheep (*Ovisaries)*. Anil Khuttan, KapilDev, Birbal Singh, DheerajMohania, Manoj Kumar , VinodVerma, **Anal K.Jha** and Sanjeev K. Gautam,*International Journal of Animal Biotechnology*,**4**, 1-12, (2014).

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