

CURRICULUM-VITAE

Dr. Anil Ohlan

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1. Educational Qualification

| Degree | Year of Passing | University/Institute |
|--------|-----------------|----------------------------|
| Ph.D. | 2011 | University of Delhi, Delhi |
| PG | 2002 | M. D. University, Rohtak |
| UG | 2000 | M. D. University, Rohtak |
| Others | | |

2. Career Profile:

| Designation | Institute served | Duration | |
|---------------------|--------------------------|-----------|-------------|
| | | From | To |
| Assistant Professor | M. D. University, Rohtak | 21/9/2010 | - till date |
| | | | |

3. Research Advisory: Nil

| No. of Students Supervised | Ph.D. | M.Phil. |
|----------------------------|---|---------|
| | Five students are currently working for their Ph. D degree. | - |
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ACHIEVEMENTS:

- Qualified "CSIR-UGC NET" for the JRF in June 2004 and Dec 2004
- Qualified "GATE-2004" PERCENTILE 94.15 AIR 162
- Qualified "SLET-2004" for the Lectureship in Haryana

Contribution to the University/Department:

1. Deputy Coordinator SAP
2. Member DST-FIST Project Implementation Group

3. NAAC Committee (organizing secretary)
4. Member Publication Committee (Science Conclave) Dec. 2-3, 2011
5. of DST-INSPIRE internship program held in April 2012
6. Member Core Committee for 54th Annual Conference of Association of Microbiologists of India (AMI- 2013) held on Nov. 17-20, 2013
7. Organizing secretary for Seminar on Solar Cell & Photonics on 09.03.2013 held in the department of Physics
8. Organizing Secretary RUSA (Steering Committee)
9. Publication Committee (Science Conclave) 2014
10. Member Steering committee University with potential for excellence

Membership:

- Member of Royal Society of Chemistry (U.K) (No. – 516049)
- Life Member of Magnetic society of India (LM – 409)

Technical Skills:

- | | |
|--|---|
| <ul style="list-style-type: none"> ▣ Spectroscopy | <ul style="list-style-type: none"> ▣ Ultra Violet Visible ▣ Infrared Spectroscopy |
| <ul style="list-style-type: none"> ▣ Synthesis | <ul style="list-style-type: none"> ▣ Synthesis of various Conducting Polymers |
| <ul style="list-style-type: none"> ▣ Physical Testing | <ul style="list-style-type: none"> ▣ TGA, DSC, TEM & XRD ▣ Four-probe test for conductivity measurement ▣ Various other physical tests ▣ Vector Network Analyzer (VNA) for Microwave Properties |

PROJECTS UNDERTAKEN & LIST OF PUBLICATIONS:

Projects Undertaken:

- **UGC Major Research Project: Reference No.: F. No. 41-1014/2012(SR)**
Title: Synthesis of conjugated polymer and graphene based thermally conducting nanocomposites for microwave absorption and electromagnetic shielding
Duration: 3 years (July 2012 – June 2015);

- **UGC – SAP (DRS – I) Condensed Mater Physics Including Polymer Physics (Dy. Coordinator)**

Duration: 5 years (2012 –2017); **Total Grant Sanctioned:** Rs. 70.5/- lakhs

List of Publications:

- (1) Encapsulation of Barium Ferrite and Reduced Graphene Oxide in poly (o-toluidine) as a Barrier for Electromagnetic Radiations. Preeti Gairola, [Anil Ohlan](#), S. P. Gairola, Vivek Verma, S. K. Dhawan, L. P. Purohit. *Crystal Research and Technology* 52 (2017) 1700117. [I.F.- 1.0]
- (2) Effect of mechanical milling on structural, dielectric and magnetic properties of BaTiO₃–Ni_{0.5}Co_{0.5}Fe₂O₄ multiferroic nanocomposites. Sushma Lather, Anjali Gupta, Jasvir Dalal, Vivek Verma, Rahul Tripathi, [Anil Ohlan](#), *Ceramics International* 43 (2017), 3246-3251[I.F.- 2.986]
- (3) Poly (3, 4-ethylene dioxythiophene) laminated Reduced Graphene Oxide composites for Effective Electromagnetic Interference shielding. Jasvir Dalal, Anjali Gupta, Sushma Lather, Kuldeep Singh, S.K. Dhawan, [Anil Ohlan](#), *Journal of Alloys and Compound* 682 (2016) 52-60 [I.F.- 3.133]
- (4) Structural, magnetic and ferroelectric properties of Pr doped multiferroics bismuth ferrites. V Verma, A Beniwal, [Anil Ohlan](#), R Tripathi, *Journal of Magnetism and Magnetic Materials* 394 (2015) 385-390. [I.F.- 2.63]
- (5) In Situ Synthesis of Polypyrrole-γ-Fe₂O₃-Fly Ash Nanocomposites for Protection against EMI Pollution. Swati Varshney, [Anil Ohlan](#), V. K. Jain, V. P. Dutta, S. K. Dhawan, *Industrial & Engineering Chemistry Research* 53 (2014), 14282- 14290. [I.F.- 2.843]
- (6) Synthesis of ferrofluid based nanoarchitected polypyrrole composites and its application for electromagnetic shielding. Swati Varshney, [Anil Ohlan](#), V. K. Jain, V. P. Dutta, and S. K. Dhawan. *Materials Chemistry and Physics* 143 (2014) 806-813. [I.F.- 2.084]
- (7) Nanostructured graphene/Fe₃O₄ incorporated polyaniline as a high performance shield against electromagnetic pollution. Kuldeep Singh, [Anil Ohlan](#), Viet Hung Pham, Balasubramanian R., Swati Varshney, Jinhee Jang, Seung Hyun Hur, Won Mook Choi, Mukesh Kumar, S. K. Dhawan, Byung-Seon Kong and Jin Suk Chung, *Nanoscale* 5 (2013) 2411-2420. [I.F.- 7.367]
- (8) Robust Multifunctional Free Standing Polypyrrole Sheet for Electromagnetic Shielding. Swati Varshney, [Anil Ohlan](#), Kuldeep Singh, V. K. Jain, V. P. Dutta, and S. K. Dhawan. *Science of Advanced Materials* 5 (2013) 881-890. [I.F.- 1.671]

- (9) Synthesis, characterization and surface properties of Fe₂O₃decorated ferromagnetic polypyrrole–nanocomposites Swati Varshney, Kuldeep Singh, [Anil Ohlan](#), V. K. Jain, V. P. Dutta and S. K. Dhawan. *Journal of Alloys and Compounds*, 538 (2012), 107-114. [I.F.- 3.133]
- (10) Thermal, dielectric and microwave absorption properties of polyaniline-CoFe₂O₄ nanocomposites. Namita Gandhi, Kuldeep Singh, [Anil Ohlan](#), D. P. Singh, S K Dhawan. *Composites Science & Technology* 71 (2011) 1754–1760. [I.F.- 4.873]
- (11) Microwave absorption properties of NiCoFe₂O₄-graphite embedded poly(o-phenetidine) nanocomposites. [Anil Ohlan](#), Kuldeep Singh, Namita Gandhi, Amita Chandra, S. K. Dhawan. *AIP Advances* 1 (2011) 032157 [I.F.- 1.568]
- (12) Microwave absorption behavior of core-shell structured poly (3,4-ethylenedioxy thiophene)-barium ferrite nanocomposites. [Anil Ohlan](#), Kuldeep Singh, Amita Chandra, S. K. Dhawan. *ACS Applied Materials and Interfaces* 2 (2010) 927-933. [I.F.- 7.504]
- (13) Synthesis of conducting ferromagnetic nanocomposite with improved microwave absorption properties. Kuldeep Singh, [Anil Ohlan](#), A. K. Bakhshi, S. K. Dhawan. *Material Chemistry & Physics* 119 (2010) 201-207. [I.F.- 2.084]
- (14) Shielding and dielectric properties of sulfonic acid doped π -conjugated polymer in 8.2-12.4 GHz frequency range. [Anil Ohlan](#), Kuldeep Singh, S. K. Dhawan. *Journal of Applied Polymer Science* 115 (2010) 498-503. [I.F.- 1.86]
- (15) Conjugated polymer nanocomposites: Synthesis, dielectric and microwave absorption studies. [Anil Ohlan](#), Kuldeep Singh, Amita Chandra, V. N. Singh, S. K. Dhawan. *Journal of Applied Physics* 106 (2009) 044305. [I.F.- 2.068]
- Also selected for the publication in *Virtual Journal of Nanoscale Science & Technology* 20 (2009)10**
- (16) Conducting polymer embedded with nanoferrite and Titanium dioxide nanoparticles for microwave absorption. S. K. Dhawan, Kuldeep Singh, A. K. Bakhshi, [Anil Ohlan](#). *Synthetic Metals* 159 (2009) 2259-2262. [I.F.- 2.435]
- (17) Microwave absorption properties of conducting polymer composite with barium ferrite nanoparticles in 12.4-18 GHz. [Anil Ohlan](#), Kuldeep Singh, Amita Chandra, S. K. Dhawan. *Applied Physics Letter* 93 (2008) 053114. [I.F.- 3.411]
- (18) Dielectric and magnetic properties of conducting ferromagnetic composite of polyaniline with γ -Fe₂O₃ nanoparticles. Kuldeep Singh, [Anil Ohlan](#), R. K. Kotnala, A. K. Bakhshi, S. K. Dhawan. *Material Chemistry & Physics* 112 (2008) 651-658. [I.F.- 2.084]

- (19) Conducting ferromagnetic copolymer-complex of aniline and 3,4-ethylene dioxy thiophene containing nano-crystalline barium ferrite particles. [Anil Ohlan](#), Kuldeep Singh, Amita Chandra, S. K. Dhawan. *Journal of Applied Polymer Science* 108 (2008) 2218–2225. [I.F.- 1.86]
- (20) Poly (3, 4-ethylene dioxythiophene) γ -Fe₂O₃ polymer composite: Superparamagnetic behavior and variable range hopping 1-D conduction mechanism – synthesis & characterization. Kuldeep Singh, [Anil Ohlan](#), Parveen Saini, S. K. Dhawan. *Polymers for Advanced Technologies* 19 (2008) 229–236. [I.F.- 1.907]

PATENTS:

- Conducting Copolymer Ferromagnetic Composite and a Process for the Preparation thereof
S. K. Dhawan, Kuldeep Singh, Nikhil Sobti, [Anil Ohlan](#), Parveen Saini, Beena Gupta, R. P. Pant, R. K. Kotnala, Hari Kishan, and P. C. Kothari
US Patent: US Patent; US 8,277,690 B2, Publication Date: October 2, 2012

BOOK CHAPTERS:

- Designing of Conducting Polyaniline composites for EMI Shielding by Kuldeep Singh, [Anil Ohlan](#), S.K. Dhawan, in “**Trends in Polyaniline Research**” Al-Nakib Chowdhury, Takeo Ohsaka, Aminur Rahman and Mominul Islam (Ed.) Nova Science Publishers Inc. New York USA (2013) ISBN: 978-1-62808-427-6
- Polymer-Graphene Nanocomposites: Preparation, Characterization, Properties, and Applications by Kuldeep Singh, [Anil Ohlan](#) and S.K. Dhawan Nanocomposites - New Trends and Developments, Dr. Farzad Ebrahimi (Ed.), ISBN: 978-953-51-0762-0, InTech(2012).
- Designing of Nano Composites of Conducting Polymers for EMI Shielding, S.K. Dhawan, [Anil Ohlan](#), Kuldeep Singh in “**Advances in Nanocomposites - Synthesis, Characterization and Industrial Applications**” Boreddy Reddy (Ed.), ISBN: 978-953-307-165-7, InTech (2012)

Papers presented in Conferences/ Seminars:

- (1) Conduction Mechanism in Conjugated Polymer Based Ternary Nanocomposites. Anil Ohlan, Sajjan Dahiya, A. S. Maan, Rahul Tripathi and S. K. Dhawan, National Symposium on Technologically Advanced Functional Materials (NSTAFM -2017), March 16-17, 2017, Organized by Department of Physics, Central University of Rajasthan, Badarsindri

- (2) Microwave absorption properties of Core shell structured polyaniline nanocomposites in 12.4 – 18 GHz frequency range. Anil Ohlan, Sajjan Dahiya, A. S. Maan, Kuldeep Singh and S. K. Dhawan, National Symposium on Technologically Advanced Functional Materials (NSTAFM -2017), March 16-17, 2017, Organized by Department of Physics, Central University of Rajasthan, Badarsindri
- (3) Microwave absorption properties of poly (o-ethoxy) aniline-(NiCoFe₂O₄)-graphite nanocomposites in 12.4–18 GHz. Anil Ohlan, Kuldeep Singh, Namita Gandhi, N. Singh, Amita Chandra, S. K. Dhawan , 4th International conference on Electroactive Polymers, 21-26 Nov, 2010, Surajkund (Faridabad)
- (4) EMI Shielding Properties of Conducting Ferromagnetic Composite of Polyaniline with Barium Ferrite and TiO₂. *Anil Ohlan, Kuldeep Singh, R.K.Kotnala, V. N. Singh, Amita Chandra and S.K. Dhawan.* International Conference on Advanced magnetic materials and their Application in 21st century, 21-23 Oct, 2008 **(Received Best Poster Award)**
- (5) Conducting ferromagnetic composite of polyphenylamine with intercalated graphite/ γ -Fe₂O₃: Synthesis Characterization and its application in EMI shielding. Kuldeep Singh, *Anil Ohlan, R.K.Kotnala, R.K.Pant A.K.Bakhshi and S.K. Dhawan.* International Conference on Advanced magnetic materials and their Application in 21st century, 21-23 Oct, 2008
- (6) Microwave Absorption study of ferromagnetic Conducting Polyaniline- iron oxide (PANI-Fe₂O₃) PVA film in the frequency of 12.4 to 18GHz. Kuldeep Singh, **Anil Ohlan** and S.K. Dhawan (POLY-2008 New Delhi)
- (7) Shielding and Dielectric Properties of Ferromagnetic Conducting Polyaniline/PVA Film in 12.4-18 GHz. S.K. Dhawan, Kuldeep Singh, **Anil Ohlan**, A.K Bakhshi (URSI General Assembly - 2008)
- (8) A conducting ferromagnetic polymer composite of PEDOT-Fe₂O₃ for its application in microwave absorber in the 8-12 GHz range. Kuldeep Singh, **Anil Ohlan**, Parveen Saini, Amita Chandra and S.K.Dhawan (ICEP-2007, Goa)
- (9) Micellar polymerization of polyaniline formed using different level of surfactant-dopant (DBSA) - spectroscopic and conductivity studies. **Anil Ohlan**, Kuldeep Singh, Amita Chandra, S.K.Dhawan (ICEP-2007, Goa)
- (10) Nano Ferromagnetic Conducting Polypyrrole - Synthesis & Characterization Swati Varshney, Kuldeep Singh, **Anil Ohlan**, S.K. Dhawan (ICEP-2007, Goa)

- (11) Synthesis of polyaniline-Ag core shell nanocomposites via emulsion polymerization using surfactants. Parveen Saini, Kuldeep Singh, **Anil Ohlan** and S. K. Dhawan (ICEP-2007, Goa)
- (12) Incorporation of nanosize Fe₃O₄ particles in the polyaniline matrix-using aerosol OT. Kuldeep Singh, Parveen Saini, **Anil Ohlan**, Suman Anand, K.N.Sood and S. K. Dhawan. (NANO-2006, Bangalore)
- (13) Nano Crystalline Barium Ferrite-PEDOT Composite: Synthesis and Characterization. **Anil Ohlan**, Kuldeep Singh, Parveen Saini, Suman Anand, R.K.Kotnala, K.N.Sood and S.K.Dhawan. (NANO-2006, Bangalore)
- (14) Polyaniline- PEDOT conducting copolymer containing magnetic nanoparticles Parveen Saini, Kuldeep Singh, **Anil Ohlan**, and S. K. Dhawan. (NANO-2006, Bangalore)
- (15) Conducting Polymer Composites In corporating Barium Ferrite Nano Particles. **Anil Ohlan**, Kuldeep Singh, P. Saini and S.K. Dhawan, R.K. Kotnala and P.C. Kothari (International Conference on Nano Science & Technology – 2006, New Delhi)
- (16) Nanostructured Conducting Polymer Ferromagnetic composites: Synthesis and Characterization. Kuldeep Singh, **Anil Ohlan**, P. Saini and S.K. Dhawan, R.K. Kotnala and P.C. Kothari (International Conference on Nano Science & Technology – 2006, New Delhi)
- (17) Conducting Polymers: Preparation, Properties, Practices, and Prospects. Parveen Saini, Kuldeep Singh, **Anil Ohlan** and S.K.Dhawan (National Seminar on Recent Advances in Electric and Electronic Polymers, Nov 14, 2005, BHU Varanasi)