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Asst. Professor & Head, Department of Physics
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EDUCATION

- 2018: Ph. D. in Physics, MLSU, Udaipur, Rajasthan, India. Topic: “Studies of magnetic and transport properties of some nanosized Fe and Cr based spinels”
- 2012: M. Sc. Physics (74.20%), Nirmalagiri College, Kannur University, Kerala
- 2009: B.Sc. Physics (83.10%) Nirmalagiri College, Kannur University, Kerala,
- 2005: +2 (80%) IJM HSS Kottiyoor, Board of Secondary Education Kerala, India
- 2003: SSLC (81%) IJM HSS Kottiyoor, Board of Secondary Education Kerala

TEACHING EXPERIENCE

- 01/06/2018- Present: Assistant Professor, Department of physics, Mary Matha Arts and Science College, Mananthavady, Wayanad, Kerala India-670645
- 05/06/2017- 28/03/2018: Assistant Professor in EKNM Govt. College, Elerithattu, Kerala, India
- 2012 -2013 Sanjos Senior Secondary School, Thaliparamba, Kannur, Kerala, India
- 2009-2010: Mount Assisi Senior Secondary School (Jr), Bhagalpur, Bihar, India
- 2005-2006: St. Joseph's School (Primary School) Ragarganj, Gonda, U. P. India

RESEARCH PROFILE:

- **Specialization:** Nanoscale Magnetism & Hyperfine Interactions
- H-Index: 8, Citations: 128 <https://urlzs.com/FpUkM>
<https://scholar.google.co.in/citations?user=pRlmmD0AAAAJ&hl=en>
- **Research Interests:** Functional Materials; Nanoparticles Synthesis-Solution self-combustion; X-Ray & Mössbauer Spectroscopy; Magnetic & Dielectric properties.
- **Research experience:** 2003: JRF under DAE-BRNS (Department of Atomic Energy India- Board of Research in Nuclear Science India) funded Major Research Project “Magnetic and Transport Properties of Functional Nanosized Fe and Cr based spinels” in collaboration with BARC-Mumbai
2018: Ph. D. in Physics, Title: “Studies of magnetic and transport properties of some nanosized Fe and Cr based spinels”
- Listed in world Scientist Ranking 2021 & 2022: <https://www.adscientificindex.com/?con=&tit=&q=sijo>

RESEARCH PUBLICATIONS:

1. **Sijo A. K. (2017)** Magnetic and structural properties of $\text{CoCr}_x\text{Fe}_{2-x}\text{O}_4$ spinels prepared by solution self-combustion method. *Ceramics International*, 43(2), 2288-2290, ISSN: 0272-8842 <https://doi.org/10.1016/j.ceramint.2016.11.010> Impact factor: **4.527**
 2. **Sijo A. K. (2017)** Influence of fuel-nitrate ratio on the structural and magnetic properties of Fe and Cr based spinels prepared by solution self-combustion method, *Journal of Magnetism and Magnetic Materials* 441 672-677, <https://doi.org/10.1016/j.jmmm.2017.06.060> Impact factor: **2.993** ISSN: 0304-8853
 3. **Sijo A. K, D. P. Dutta, M. Roy (2017)** Dielectric study of CoCrFeO_4 nano-powder prepared by solution self-combustion, *Ceramic International*, 43, 16915-16918, <https://doi.org/10.1016/j.ceramint.2017.09.093> Impact factor: **4.527** ISSN: 0272-8842
 4. **Sijo A. K, D. P. Dutta, M. Roy, Sudheesh V. D. (2017)** Magnetic and dielectric properties of NiCrFeO_4 prepared by solution Self-combustion method, *Materials Research Bulletin* 94, 154-159. Impact factor: 4.641 ISSN 0025-5408 <https://doi.org/10.1016/j.materresbull.2017.05.062>
 5. **Sijo A. K, D. P. Dutta, (2018)** Size-dependent magnetic and structural properties of CoCrFeO_4 nano-powder prepared by solution self-combustion, *Journal of Magnetism and Magnetic Materials* 451 450-453 <https://doi.org/10.1016/j.jmmm.2017.11.092> Impact factor: **2.993**, ISSN: 0304-8853
 6. **Sijo A. K. (2018)** Erratum to Influence of fuel-nitrate ratio on the structural and magnetic properties of Fe and Cr based spinels prepared by solution self-combustion method, *Journal of Magnetism and Mag. Materials* 458, 371, <https://doi.org/10.1016/j.jmmm.2018.03.045> Impact factor: **2.993**, ISSN: 0304-8853
 7. L. Kaykan, **Sijo A. K, J. Mazurenko, A. Żywczak, (2021)** Influence of the preparation method and aluminium ion substitution on the structure and electrical properties of lithium-iron ferrites *Applied Nanoscience* <https://doi.org/10.1007/s13204-021-01691-0> Impact factor: **3.674** ISSN 2190-5509
 8. **Sijo A. K, V. K Jha, L. Kaykan, D. P. Dutta (2020)** Structure and cation distribution in superparamagnetic NiCrFeO_4 nanoparticles using Mössbauer study, *Journal of Magnetism and Magnetic Materials* 497, 166047 <https://doi.org/10.1016/j.jmmm.2019.166047> Impact factor: **2.993**, ISSN: 0304-8853
 9. L. Kaykan, **Sijo A. K, A. Żywczak, J. Mazurenko, K. Bandura (2020)** Tailoring of structural and magnetic properties of nanosized lithium ferrites synthesized by sol-gel self-combustion method, *Applied Nanoscience* <https://doi.org/10.1007/s13204-020-01413-y> Impact factor: **3.674** ISSN 2190-5509
 10. L.S Kaykan, J. Mazurenko, **Sijo A. K, V I Makovysyn (2020)** Structural properties of magnesium-substituted lithium ferrites, *Applied Nanoscience* <https://doi.org/10.1007/s13204-020-01259-4> Impact factor: **3.674** ISSN 2190-5509
 11. V. K. Jha, **Sijo A. K, S. N. Alam, M. Roy (2020)** Effect of Nd Doping on Structural, Electrical, Thermal and Magnetic Properties of Multifunctional BiFeO_3 Ceramics, *Journal of Superconductivity and Novel Magnetism* 33, 455-46, <https://doi.org/10.1007/s10948-019-05206-5> Impact factor: **1.506** ISSN 15571939
 12. L.S Kaykan, J.S. Mazurenko, **Sijo A. K (2020)** Effect of pH on magnetic properties of ordered phase Co-doped lithium ferrites nanoparticles synthesized by sol-gel auto combustion method, 12 (4) *Journal of Nano and Electronic Physics* Impact factor: **0.425** ISSN 20776772 [https://doi.org/10.21272/jnep.12\(4\).04008](https://doi.org/10.21272/jnep.12(4).04008)
 13. **Sijo A. K, N. Lakshmi, K. Venugopalan, D. P. Dutta, V. K. Jain, (2015)** Effect of fuel to oxidizer ratio on structural and magnetic properties of ZnCrFeO_4 nano-powder. *Advanced Porous Materials*, 2(3), 189-191 <http://dx.doi.org/10.1166/apm.2014.1071> ISSN 2327-3941
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14. **Sijo A. K (2018)** Tailoring of the magnetic and structural properties of nano-sized ferrites - Recent Advances in Porous Ceramics <http://mts.intechopen.com/articles/show/title/tailoring-of-the-magnetic-and-structural-properties-of-nanosized-ferrites> ISBN:978-1-78923-653-8
15. V Jain, N Lakshmi, VK Jain, **Sijo A. K**, K Venugopalan **(2015)** First principle calculation in FeCo overlayer on GaAs substrate AIP Proc. ISBN: 978-0-7354-1310-8 <http://dx.doi.org/10.1063/1.4917917>
16. V K Jain, N Lakshmi, V Jain, **Sijo A. K**, K. Venugopalan, **(2015)** High energy ball milling study of Fe₂MnSn Heusler alloy AIP Proc. ISBN: 978-0-7354-1310-8 <http://dx.doi.org/10.1063/1.4918180>
17. L.S Kaykan, **Sijo A. K**, J. Mazurenko, Ostapovich N V **(2020)** Manifestation of Ferroelectric Properties of Aluminium Substituted Nanosized Lithium -Iron spinels"International meeting on Clusters and Nanostructured Materials-CNM'6" National Academy of Sciences of Ukraine. ISBN 978-966-02-9366-3
18. **Sijo A. K**, V. Jain, N. Lakshmi, K. Venugopalan, D P. Dutta Structural and Magnetic Properties of Nano-sized CoCrFeO₄ Prepared by Self- Combustion Method. International Conference on Magnetic Materials and Applications (ICMAGMA-**2014**), p-185, Pondicherry University, India
19. VK Jain, V Jain, **Sijo A. K**, N. Lakshmi, K. Venugopalan, Electronic Structure of Fe_{2-x} Co_xVal Heusler Alloy: A Ground State Calculation by GGA, International Conference on Magnetic Materials and Applications (ICMAGMA-**2014**)
20. **Sijo. A. K**, Vishal Jain, N. Lakshmi, K. Venugopalan, D. P. Dutta. Role of Fuel-Nitrate Ratio on Structural and Magnetic Properties of Fe and Cr based Spinels Prepared by Self- Combustion method. International Conference on Nano Science and Engineering Applications (ICONSEA-**2014**)
21. **Sijo A. K**, N. Lakshmi, V.Jain, D. P. Dutta, Variation in Structural and Magnetic Properties of Fe and Cr based Spinels with Fuel-Nitrate Ratio, International conference on Nanotechnology (ICNT-**2015**) ISBN 978-81-927756-2-3
22. Roona N, Arya T.R., **Sijo. A.K.** et.al **(2015)** Synthesis of Nano-sized NiFe₂O₄ by Solution Combustion Method with different fuel to Oxidizer Ratio, First National Conference on Advanced Nanomaterials (CAN-2015) ISBN 978-81-931227-0-9

CONFERENCES

1. Presented a paper at Virtual International Transdisciplinary Conference (VITC-2020) from 26th to 28th of August 2020 at VIT, Tamil Nadu, India
 2. Presented a paper in First International Symposium on Mechanics 9-12 July 2018 <https://mechanics.nscj.co.uk/sessions/Cleland.html> in Aberdeen, Scotland, United Kingdom.
 3. Presented paper in First International Symposium on Quantum Technology 24-27 June 2018 <https://quantum.nscj.co.uk/sessions/Benioff.html> in Aberdeen, Scotland, United Kingdom.
 4. Presented paper Indo-French workshop on Pressure Effects of Strongly Correlated Materials IWPESCM-2017, CHPR, Bharathidasan University, Tamilnadu
 5. Presented poster in International Conference on Nanotechnology ICNT-2015, Calcutta, India ISBN 978-81-927756-2-3
 6. Presented poster in Conference on Advanced Nanomaterials CAN-2015, Kerala, India, ISBN 978-81-931227-0-9
 7. Presented poster in International Conference on Magnetic Materials and Applications ICMAGMA-2014 PU, Pondichery, India
 8. Presented poster in International Conference on Nano Science & Engineering Applications ICONSEA-2014 JNTU Hyderabad, India
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INTERNATIONAL CONFERENCES-CHAIRER/PROGRAM COMMITTEE MEMBER

1. Chairer, International Conference on Advanced Materials (ICAM 2019) from 12-14 June 2019, Kerala, India
2. Technical Program Committee Member "The 7th Global Conference on Polymer and Composite Materials (PCM 2021)" held at Xi'an, China November 1-4, 2020 <http://2020.cpcmconf.org/TPC>
3. Technical Program Committee Member "The 8th Global Conference on Polymer and Composite Materials (PCM 2021)" held at Macau, the "Vegas of China" on 2021 August 16-19 <http://www.cpcmconf.org/TPC>
4. Technical Program Committee Member "The 9th Global Conference on Polymer and Composite Materials (PCM 2022)" July 4-7, 2022, Xi'an, China <http://www.cpcmconf.org/TPC>
5. Guest Reviewer - 5th Global Conference on Polymer and Composite Materials 10-13 April 2018, Kitakyushu city, Japan

REVIEWER INTERNATIONAL JOURNALS

- Outstanding Reviewer Award 2017, Materials Letters, Elsevier Publications <https://drive.google.com/file/d/1F7LG1BDf3ak-oBDxvY4YVlraQ4fPyqLI/view?usp=sharing>
- Top reviewer, Applied Physics A | Publons Springer Nature Publications
- Reviewed 100+ Scopus Articles. <https://publons.com/a/1274888>
- Recognized Reviewer of following international journals

VERIFIED REVIEWS

 (60) Applied Physics A 	 (17) Materials Letters 
 (9) Advanced Powder Technology 	 (7) Materials Research Express 
 (5) Journal of Nanoparticle Research 	 (2) Journal of Physics D: Applied Physics 
 (2) Physica Scripta 	 (1) Global Conference on Polymer and Composite Materials
 (1) Journal of Alloys and Compounds 	

RESEARCH COLLABORATIONS

1. Vasyl Stefanyk Precarpatian National University, 57 Shevchenko, Ivano-Frankivsk 76018, Ukraine
 2. National University of Uzbekistan named After M. Ulugbek, Tashkent, Uzbekistan-100174
 3. Ivano-Frankivsk National Medical University, Ivano-Halytska Str. 2, Ivano-Frankivsk 76018, Ukraine
 4. Department of Physics, MLSU, Udaipur, Rajasthan, India
 5. Chemistry Division, Bhabha Atomic Research Centre (BARC), Mumbai 400085, India
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