

CURRICULUM VITAE

1. **Name** : Dr. Fakir Mohammad Attar
2. **Designation** : Associate Professor
3. **Office Address** : Department of Physics, Poona
College, Camp, Pune -01



E-mail: fmdattar@gmail.com

4. **Date of Birth** : 08:07:1977

5. Academic Qualification

Degree	Year	Institution/ Board	Country
B.Sc.	1999	University of Pune (S.P.P.U.)	India
M.Sc.	2001	University of Pune (S.P.P.U.)	India

6. Teaching Experience

Duration	Position Held	Organization
15 December 2005 to 11 July 2016	Assistant Professor	Fergusson College, Pune-04.
12 July 2016 to 10 May 2018	Assistant Professor (Level 11 to 12)	AKI'S Poona College, Pune -01.
11 May 2018 to Till Date	Associate Professor	AKI'S Poona College, Pune -01.

7. **PhD Topic** : Measurement of Activation and Metastable state Cross-sections of a few Nuclear Reactions Induced by Neutrons of 13.6 to 14.8 MeV Energies.

8. Area of Interest : Nuclear Physics, Radiation Physics, Accelerator Physics

9. Courses Taught : Nuclear Physics, Solid state Physics, Atomic & Molecular Physics, Classical Electrodynamics, Atoms, Molecules and Solids, Mechanics, Heat & Thermodynamics, Lasers, Astronomy & Astrophysics

10. Other Innovative Activities : Nil

11. Membership of Learned Societies and Administrative Bodies;

- Member of Indian Association of Physics Teachers (IAPT), Member of Pune University Teachers Association (PUTA), Member of Indian Physics Association (Pune Chapter)

12. Abroad Visits

- Dubna, Moscow- Russia

13. Publication Details

a) Name of the Journals/ Books in which papers are published

1. Cross sections for formation of ^{139m}Ce radioisotope through the $^{140}\text{Ce}(n, 2n)$ reaction over 13.73–14.77 MeV neutrons.
Vishal D. Bharud, **F.M.D. Attar**, S.S. Dahiwale, S.D. Dhole, V.N. Bhoraskar
Applied Radiation and Isotopes 146 (2019) 10–17.
2. Measurement and Estimation of Cross Sections for $^{55}\text{Mn}(n, \gamma)^{56}\text{Mn}$ and $^{65}\text{Cu}(n, \gamma)^{66}\text{Cu}$ Reactions Using Accelerator-Based Neutron Source.
Mehdi S. Barough, V. D. Bharud, B. J. Patil, **F. M. D. Attar**, V. N. Bhoraskar and S. D. Dhole
Nuclear Science And Engineering
DOI: <https://doi.org/10.1080/00295639.2017.1323505>

3. Lithium diffusion in polyether ether ketone and polyimide stimulated by in situ electron irradiation and studied by the neutron depth profiling method.
J. Vacik, V. Hnatowicz, **F.M.D. Attar**, N.L. Mathakari, S.S. Dahiwale, S.D. Dhole and V.N. Bhoraskar. Radiation Effects & Defects in Solids, 2014.
<http://dx.doi.org/10.1080/10420150.2014.958745>
4. Cross sections of the (n, p) reaction on the ^{78}Se and ^{80}Se isotopes measured for 13.73 MeV to 14.77 MeV and estimated for 10 MeV to 20 MeV neutron energies.
F. M. D. Attar, S. D. Dhole, and V. N. Bhoraskar,
Physical Review C **90**, 064609 (2014).
5. Cross-sections for the formation of isomeric pair $^{75}\text{Ge}^{\text{m,g}}$ through $(n, 2n)$, (n, p) and (n, α) reactions measured over 13.73 MeV to 14.77 MeV and calculated from near threshold to 20 MeV neutron energies. **F.M.D.Attar**, S.D.Dhole, S.Kailas and V.N.Bhoraskar, Nuclear Physics A 828, 253-266 (2009).
6. Cross-sections for formation of $^{89}\text{Zr}^{\text{m}}$ through $^{90}\text{Zr}(n, 2n) ^{89}\text{Zr}^{\text{m}}$ reaction over neutron energy range 13.73 MeV to 14.77 MeV
F.M.D. Attar, R. Mandal, S.D. Dhole, A. Saxena, Ashokkumar,
S. Ganesan, S. Kailas, V.N. Bhoraskar, Nuclear Physics A 802, 1–11 (2008).

b) Papers published in Conferences / Seminars

1. Activation cross-sections of (n, p) reactions for the selenium isotopes ^{78}Se and ^{80}Se measured over neutron energy range 13.73 MeV to 14.77 MeV.
F.M.D.Attar, S.D.Dhole, V.N.Bhoraskar

Proceedings of ISINN-22, Dubna, Russia May 2014.

2. Activation cross-section of $^{78}\text{Se}(n, p)^{78}\text{As}$ reaction over 13.73 MeV to 14.77 MeV neutron energies. **F.M.D.Attar**, S.D.Dhole, V.N.Bhoraskar
Proceedings of the DAE- International Symp. on Nucl. Phys. Vol. 58, 376 (2013).
3. The excitation function for $^{93}\text{Nb}(n, \alpha)^{90}\text{Y}^m$ reaction (i) measured over 13.73MeV to 14.77MeV neutron energies and (ii) calculated over 10MeV to 20MeV neutron energies.
Bushra M.A, **F.M.D.Attar**, S.D.Dhole, V.N.Bhoraskar
Proceedings of the DAE Symp. on Nucl. Phys. Vol. 56, 532 (2011)

c) Papers presented in Conferences / Seminars

1. Activation cross-sections of (n, p) reactions for the selenium isotopes ^{78}Se and ^{80}Se measured over neutron energy range 13.73 MeV to 14.77 MeV.
F.M.D.Attar, S.D.Dhole, V.N.Bhoraskar
Proceedings of ISINN-22, Dubna, Russia May 2014.
2. Activation cross-section of $^{78}\text{Se}(n, p)^{78}\text{As}$ reaction over 13.73 MeV to 14.77 MeV neutron energies. **F.M.D.Attar**, S.D.Dhole, V.N.Bhoraskar
Proceedings of the DAE- International Symp. on Nucl. Phys. Vol. 58, 376 (2013).
3. The excitation function for $^{93}\text{Nb}(n, \alpha)^{90}\text{Y}^m$ reaction (i) measured over 13.73MeV to 14.77MeV neutron energies and (ii) calculated over 10MeV to 20MeV neutron energies.
Bushra M.A, **F.M.D.Attar**, S.D.Dhole, V.N.Bhoraskar
Proceedings of the DAE Symp. on Nucl. Phys. Vol. 56, 532 (2011)

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14. Participation in National/International One Week -duration Workshops

- NIL

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15. Participation in Conferences / Seminars / Workshops;

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| <ol style="list-style-type: none">1. Participated in International conference on Multifunctional and Hybrid material for Energy and Environment (MHMEE), January 29 to 31-2020.2. Participated in “ International conference on Nanotechnology for Human Welfare” (ICNHW 2018) 1st and 3rd February 2018.3. Participated in the “National conference on Advanced material and applications” (NCAMA 2016), 4th and 5th March 2016. |
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16. Contributions to Corporate Life

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| <ul style="list-style-type: none">• NIL |
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17. Supervising the Ph.D. Candidates:

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| <ul style="list-style-type: none">• NIL |
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(Dr. Fakir Mohammad Attar)