### ASSESSMENT/EVALUATION REPORT OF MAJOR RESEARCH PROJECT

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#### UNIVERSITY GRANTS COMMISSION BAHADUR SHAH ZAFAR MARG, NEW DELHI – 110 002

#### **A: DETAILS OF PROJECT**

1.	Title of the Project	Study of the correlation between structural and magnetic heterogeneity, and semiconductivity in Co rich region of Fe <sub>3-x</sub> Co <sub>x</sub> O <sub>4</sub> ferrites
2.	Total duration of the Project	3 years (2013-2016) and extended till 31/03/2017
3.	Project Status	Completed
4.	Subject	Physics
5.	UGC Reference No. & Date	No. F 42-804/2013 (SR) Date. 14/03/2013
6.	Grant Approved	Rs. 17, 21, 200/ (Rupees Seventeen Lakhs Twenty
		One Thousand Two Hundred only

# **B: EVALUATION REPORT OF EXPERT MEMBERS**

1.	Name of the Principal Investigator	Dr. RABINDRA NATH BHOWMIK
2.	Designation	Assistant Professor
3	Address of Principal Investigator	Department of Physics, Pondicherry University, R. Venkataraman Nagar, Kalapet, Pondicherry- 605 014
4	Whether work is focused on the title of the sanctioned project	Yes, Highly focused
5	Whether original work is done	Yes, the work is original which is corroborated by publications in international journals
6	Whether significant contribution made by the Principal Investigator	Yes, this study brings out clearly the various structural parameters and their effect on various properties
7	Whether proposed work have relevance to the society/scientific community	Yes, the contributions are original and resulted in better understanding of structure property relationship in spinel ferrites
8.	What type of contribution found in the final report: Theoretical/ Practical. If there are theoretical contribution given by the Principal Investigator. Whether real applications are given	The results obtained are very practical and realistic. Number of possible applications have been suggested.
9.	Whether theoretical contributions and their results and findings are	These experimental studies, results of which are analyzed in terms of theoretical models to draw

	published	definitive conclusions and the results are published
10.	Whether results and findings are significant	The findings are quite significant.
11.	Whether the significant publications made by Principal Investigator in peer reviewed journals	As per the submitted report, the PI has published 12 international refereed journals and 4 AIP conf. proceedings, which are by and large treated as journal publications by the scientific community.
12.	The number of publications made by Principal Investigator in standard reputed journals	More than 6 to 7 publications are in topmost Physics journals.
13.	Whether contributions made by Principal Investigator is sufficient	Yes, but in general no research is complete by itself as there will be scope for improvement and some unanswered questions always remain.
14.	Whether the findings and results of the sanctioned major research project are justifiable	
15.	Whether completed project work meet the proposed objectives	Yes
16.	Give your brief comments on the overall work of the project	On the whole, the project is well conceived, focused and relevant to current times. The project is executed not only using local facilities but also utilized mega research facilities like synchrotrons and neutrons etc. This shows that PI has taken great pains to not only complete the project but also to obtain significant achievements from the project
17.	Any specific comments	Projects such as this which involve collaborative work must be encouraged as this leads to better outcomes.
18.	Indicate your overall assessment of the project: Poor/Good/Excellent	Excellent
19.	Name & Address of Expert	Dr. P. D. Babu Centre Director UGC-DAE Consortium for Scientific Research Mumbai Centre. BARC Campus, Trombay, Mumbai – 400 085
5	Signature & Seal	Jal
	Date & Place	पी.डी. बाबू / P. D. Babu केंद्र निर्देशक / Centre Director यु.ची.सी-डी.ए.ई सी.एस.आर, मुग्बई केंद्र / UGC-DAE CSR, Mumbai Centre २४६ - सी दुसरी मंजिल, सी.एफ.बी. / 246-C, 2nd Floor C.F.B. बी.ए.आर.सी. ट्रॉग्वे / BA.R.C. Trombay, मुम्बई - Y000C4 / Mumbai - 400 085.

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2022 ١

DEAN (RESEARCH) Pondicherry University Puducherry - 605 014