COVER LETTER



"Quo Fit Cognitio Veritatis"

Name of WiP Group - Olympia Academia

Department of Physics

Aligarh Muslim University, India https://olympiaacademia.github.io/

Applicant's Name - Farah Naaz

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Faculty Advisor Prof. Sultana N. Nahar

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Total amount of funding requested - 999 \$

The group is yet to be recognized as an official student organisation by the department of the University

Leadership Structure

Role/Position	Name	Department	Responsibilities
President	Farah Naaz	Department of Physics, AMU	The President of Olympia Academia oversees all activities, sets goals, and ensures the organisation's mission is being fulfilled. They work closely with the executive team to manage the organisation effectively.
Vice President	Afifa Jamal	Department of Physics, AMU	The Vice President is responsible for organising events and projects, maintaining leadership continuity, and coordinating with other executive team members to manage the organisation effectively.
Senior Incharge	Bushra Haque	Department of Physics, AMU	The Senior Incharge is an experienced Physics expert who advises the executive team and ensures the organisation stays focused on its mission.
Secretary	Ateeba Khalid	Department of Biochemistry, AMU	The Secretary handles administrative tasks, coordinates activities and meetings, creates agendas, takes meeting minutes, and serves as the main point of contact for communication within the organisation.
Treasurer	Tooba Firdaus	Department of Physics, AMU	The role of the treasurer is to oversee the financial side of all club/society activities, such as social events and fundraising events, prepare an annual financial report and keep all records and accounts safely.
Research and Development Coordinator	Ayesha Rabia	Department of Physics, AMU	The R&D Coordinator promotes and supports research initiatives within the organisation, helping members find research opportunities, organising events, and facilitating collaborations.

How will the leadership be transferred?

A well-functioning team is crucial for achieving our goals. To create a strong network, we have designed a three-tier system for selecting team members:

- Tier 1: Applicants must submit their yearly reports, detailing their past achievements and learnings from the previous year.
- Tier 2: Shortlisted candidates will be interviewed.
- Tier 3: To ensure effective management, roles and responsibilities will be assigned based on their ability to coordinate with the team and handle their responsibilities effectively.

To ensure a smooth transfer of responsibility, the graduating members will conduct the selection process in the odd semester of their final year before they graduate.

VISION:

Olympia Academia - Women's College has identified the need for an organisation or club where students can come together to collaborate, discuss and foster new ideas. Our vision and mission is to provide such a platform not only for young women majoring in physics but also for anyone interested in the subject. The lack of such a club is significantly felt among the students, and our initiative will have an immense impact on the learning experience of all undergraduate students, specifically those willing to pursue an academic career.

Motto -

The Women's College Chapter of Olympia Academia has some exciting aims and objectives that we believe will help us build a strong community of aspiring scientists. As a mathematical sciences society, we are committed to promoting scientific interests and pursuits among students. Our organisation is unique in that it is solely managed and run by students of Women's College, and all students have an equal opportunity to take on roles and responsibilities within the organisation.

Our partnership with the AMU chapter of Olympia Academia ensures that we can benefit from their experience and expertise. We are excited about the prospect of focusing on research work in various domains of STEM, and we can't wait to share our findings with the rest of the scientific community.

We understand the importance of timely communication, and we are committed to ensuring that information about internships, workshops, meetings, and events reaches our members promptly. We will hold regular meetings to monitor the progress of our members, and we will organise meetings with distinguished guests from various STEM domains.

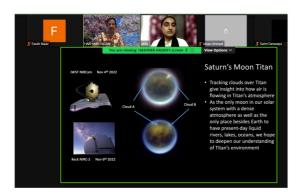
Our primary focus is on encouraging first-year students to join our community and providing guidance for their academic pursuits. We believe that scientific debates and discussions, hackathons, quizzes, and more will help us achieve this goal.

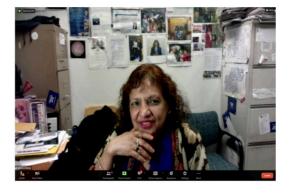
Finally, we are committed to helping our members pursue higher studies at home and foreign universities. Talks and sessions will be conducted to guide students regarding the application process. We believe that this will help our members achieve their full potential and make a meaningful contribution to the scientific community. We strongly believe that the grant will greatly facilitate our activities and enhance the outcome and opportunity that will arise from our club.

Please take note of the following activities we have undertaken and plan to undertake at Olympia Academia:

Activities Undertaken:

- Our APS student ambassador conducted a mentorship session for the students of Women's College.
- Dr Hashima Hasan, Deputy Program Scientist at NASA's James Webb Space Telescope, conducted an insightful online session for us on the James Webb Space Telescope as a senior alumna of our university.
- -Professor Sultana N. Nahar, from Ohio State University, held a special session at Aligarh Muslim University, India, where she introduced the American Physical Society (APS) and highlighted the benefits of becoming a member. She also encouraged us to create a Women in Physics (WiP) group.
- Prof. Sultana N. Nahar held a special session on admission requirements. for Ph.D. degrees at US universities.
- -Since 2014, we have been celebrating International Women's Day in the Physics Department, thanks to Professor S.N. Nahar's initiative. We hold a half-day symposium that emphasises the importance of STEM disciplines in our lives.
- Furthermore, we participate in Professor Nahar's research training-based course called "Atomic Astrophysics and Spectroscopy with Computational Workshops on R-matrix Method and SUPERSTRUCTURE," which she offers annually. We receive certificates outside our course credits.





Activities Planned:

- Establishment of a Scientific Writing Periodical: We plan to establish a small magazine to promote scientific writing among our members.
- Academic Initiatives for High School Students: Our team intends to organise workshops and seminars for high school students at schools like Senior Secondary School (Girls) and AMU Girls School. This will help young girls kick-start their academic careers.
- Advancing Scholarly Discourse at the University: We are planning to conduct a Workshop on the Current Topics of Research in Physics at Aligarh Muslim University.
- Engaging Female Scholars and Facilitating Knowledge Exchange: We aim to collaborate with women scholars and invite faculty from other chapters of Olympia Academia, such as JMI, Manipal University, and Delhi University, to broaden our network and share knowledge.

- Exploring Interdisciplinary Studies across STEM Disciplines: Our team intends to collaborate with other STEM groups at the university to explore possible interdisciplinary studies among various branches of STEM.
- **Proposal for a Book Bank:** We plan to set up a book bank to read and discuss scientific journals and papers with different majors. Our goal is to create an interdisciplinary group that enhances our knowledge in physics, biophysics, astrobiology, etc.
- **Regular Meetings:** We will organise weekly meetings among our members in hybrid mode (online and offline) to stay connected and share ideas. We plan to invite faculty for a 'Fortnight Social Activity' session at Women's College.
- **Development of a STEM Encouragement Program:** Our team intends to establish STEM groups and forums, where scholars from various interdisciplinary backgrounds could connect.
- Alumni Network and Mentorship Program: We aim to establish a strong alumni network, where past graduates can serve as mentors, offer internships, and provide guidance to young female scholars. We plan to offer a small grant to the mentees involved in these programs.
- Research Mindset Promotion: We want to foster a research mindset among female students and encourage them to take up physics as a career by promoting research blogs and articles.
- Fostering Physics as a Career: Our team aims to conduct a detailed Grad School Application program to help students prepare for their future academic endeavours.

We are committed to empowering the next generation of female scientists and promoting diversity in STEM. These activities will help us achieve our goals and create a supportive community of like-minded individuals. Our group also advocates for diversity and inclusivity. This is reflected in the composition of our team, which includes members from Kerala (Southern India), UAE, Saudi Arabia and North India. Our goal is to ensure fair and equitable representation within our group.

The Women in Physics grant will provide us with the resources to ensure we make the impact that we have envisioned which is to uplift our fellow students and enable us to carry out our activities. Our club would provide a much-needed platform to bring about a change in the current college ecosystem, which is heavily exam-driven and does not encourage alternative methods to enhance our understanding of coursework. The club aims to promote Muslim women in science, who are a minority community and severely lack representation. By participating in club activities, these girls will gain hands-on experience and learn skills to effectively communicate, contribute and become active members of the science community. This will increase their confidence in pursuing graduate careers or job applications.

Budget Sheet

After considering over/under estimations, these are the estimated amounts

	Amount (\$)	Amount(INR)	Justification
Book Bank/repository	240.50	20,000	The cost of books from reputed authors and its maintenance
Organising presentations and workshops on both fundamental and cutting-edge topics in physics.	120.32	10,000	Invitation to the reputed researchers in the field of Physics, refreshments to the participants
Mentorship Program	120.32	10,000	A small amount of recognition for the mentors
Grants for MOOCs and Internships	120.32	10,000	Providing grants for individuals who have successfully completed online courses from reputed institutes and seek to obtain a certificate to enhance their resume.
Alumni Network	36.10	3,000	Cost of holding the alumnus meets regularly
Invited talks by faculty within and outside the campus	60.16	5,000	Connecting with brilliant scholars from prestigious institutes all across India
Physics Exhibition/Workshops for high school girls in the local community outreach efforts.	120.32	10,000	Hosting the speakers and others arrangements Supplying popular science books to foster an interest in scientific inquiry.
Poster presentations and quizzes.	120.32	10,000	Arrangements for the presentation, prizes and goodies for the winners
Bi weekly social gathering with the faculty and fellow students.	24.05	2,000	Arrangement for talks by faculty, printouts for posters, post talk quizzes etc.
Promotional Expenditures(Posters, pamphlets, etc)	36.10	3,000	Cost of promoting the activities and spreading the word among students, teachers, and mentors.
TOTAL	998.51	83,000	

Prof. Md. Sajjad Athar Chairperson



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> > January 24, 2024

Women in Physics American Physical Society

The Department of Physics, Aligarh Muslim University, Aligarh encourages the participation of female candidates of Physics to the American Physical Society (APS) for the Women in Physics grant. We shall help the students in carrying out the academic activities, such as in the organization of mini workshops, conferences, physics quiz completition and other related activities which may enhance the academic profile of the students. The Department of Physics will also provide infrastructure and other available resources.

(Md. Sajjed Athar)

Chairperson

Pepartment of Physics

A.M.U., Aligarh



College of Arts and Sciences

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January 21, 2024

Women in Physics APS

To:

Ref: Women in Physics Group Grants

Dear WiP,

I am willing to be the Faculty Advisor of the female Physics students of Aligarh Muslim University applying for a Women in Physics Group Grant. I introduced APS to the Physics Department in 2013 and promoting APS since them by helping them to apply for free membership under FUND program.

The Ohio State University (OSU) has a long standing collaborative effort with Aligarh Muslim University (AMU) in India. It founded the Indo-US STEM Education and Research Center of OSU and AMU in 2013. I have been an integral part of all OSU activities. Prof. Anil Pradhan and I founded the Center with a grant from 21st Century Obama-Singh Knowledge Initiative award that OSU received. I serve as the OSU Co-Director of the Center and have introduced new programs, such as, Research Experience for Undergraduates (REU), Global Training of Physics Research and Teaching, Women's program etc at the Center.

I have been teaching, guiding, and conducting research training based course "Atomic astrophysics and spectroscopy with computational workshops on the R-matrix codes and SUPERSTRUCTURES" at AMU annually since 2014. I held the competitive UGC Adjunct Professor of Physics at AMU during 2017-2022. Otherwise my teaching and training have been under a visiting faculty as well as under the STEM Center programs.

I should be able to be the faculty advisor for students who are also involved with me in other STEM Center activities.

With best regards,



Prof Sultana N. Nahar

OSU Co-Director: Indo-US STEM Education and Research Center of the Ohio

State University and Aligarh Muslim University

Adjunct Professor Physics at AMU (UGC program), 2017-2022, India

Adjunct Professor of Physics, Cairo University, Egypt

Plan to form an official club with a Faculty Advisor

Currently, our association comprises approximately 40-50 students, and we aim to expand to 150 members in the next few years.

The leadership structure of our organisation is meticulously organised and comprises committed members who ardently fulfil their designated roles. These roles include the President, Vice President, Senior in Charge, Secretary, Treasurer, and R&D Coordinator. We have plans to strengthen the inner functioning of the club by adding a social media team and volunteers who will help promote the club's activities and organise events. The proposed changes will help us to improve our outreach and expand our network.

Our primary objective is to achieve official recognition from the Women's College at Aligarh Muslim University and lead the way in this regard. To that end, we have invited several faculty members of our institution to lend their expertise and support throughout our journey. We are delighted to have secured the assistance of a highly qualified faculty advisor, Prof Sultana N. Nahar who has demonstrated a keen interest in the growth and development of our fellow students.

We have discussed the matter with our department chair, and we are pleased to report that he has expressed a positive response. The club primarily comprises sophomore and junior year students at present, and we aim to expand our reach to freshman and final year students to serve their needs and tailor our club activities to their benefit. We also plan to organise the group under different facets of academic expertise among the members and enable interdisciplinary discourse that will significantly benefit all. Currently, we conduct online seminars that do not require significant funds. However, we plan to organise offline seminars and workshops to enhance the quality of the learning experience and make it more hands-on. Furthermore, we are looking to have a dedicated room and place of meeting in our college building, which would significantly facilitate our daily activities.

At the present initial stage of the establishment membership in our organisation is completely free and open to all. However, as we advance our position as an official organisation and strive to strengthen our foundation, we have planned to levy a nominal one-time charge of 200 rupees (\$2.5) as a membership fee for the sake of the sustainability of the club in the long run. We believe that this small fee will enable us to provide our members with high-quality services and resources, while also ensuring that we can continue our efforts to promote our mission and vision sustainably.