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Division of Condensed Matter Physics

Association of Asia-Pacific Physical Societies

Prof. Yaping Chiu (Editor)

Prof. S. M. Yusuf (Editor and Vice Chair)

NEWSLETTER OF THE DCMP (Division of Condensed Matter Physics)
AAPPS (Association of Asia-Pacific Physical Societies)

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Chair Message

Dear friends,

I am most delighted to write this welcome message to you all for the 1st issue of the AAPPS (Association of Asia-Pacific Physical Societies)-DCMP (Division of Condensed Matter Physics) Newsletter. As reported in a separate article by Prof. H. Nojiri, it took almost two years, from a small meeting in Malaysia to the formal announcement of the DCMP at the end of last year.

It was a small but momentous step for a person directly involved in the two-year-long process leading to the DCMP formation. We all firmly believe that the DCMP holds enormous potential in store for all of us working in the condensed matter physics in the Asia and Pacific regions. We have officially joined as the fourth division under the AAPPS and have since been working to establish the organization of the DCMP.

I am extremely honored to work with two vice-chairs (Profs. H. Nojiri and S. M. Yusuf), secretary-general (Prof. K. Choi), and all ten members of the DCMP-EXCO members, who themselves are distinguished scientists. The goal we have and the ambition we aim are rightly very high. As an organization representing the condensed matter physics in the Asia-Pacific region, we want to be at the center of the fascinating and vibrant activities in the vast regions. And we aim to become the center of gravity for whatever future close collaboration we can imagine for the region.

On this high note, I would like to ask you all for active participation and good-will ambassador for the DCMP. We only took a small step of a long and fruitful journey, which will take commitments from all of us. But I do not doubt what we can achieve together and in the long run.

Professor Je-Geun Park
Chair of DCMP
Department of Physics & Astronomy
Seoul National University

Vice Chair Message

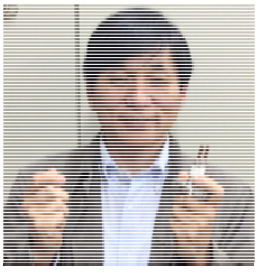
Towards the Starting up of the Division of Condensed Matter Physics

About two years ago, through Physical Societies, we were asked if there is an interest in forming a division for each field in AAPPS. In the Asia-Pacific region, not only physics but also various academic research activities are growing with the development of the area. However, the framework of regional academic exchange has been less developed than in Europe, for instance. It is mainly limited to bilateral and temporal exchanges. In case of Japan, symposiums inviting speakers from other physical societies are held only once every few years. On the other hand, a certain number of the members participate in APS and other activities to carry out international research activities. If members of a physical society constantly interact with members of other physical societies by holding meetings and other activities together, it would trigger international joint researches in various topics.

When the 14th Asia-Pacific Physics Conference was announced in Malaysia in November 2019, we called on the participants of the discussion meeting to form a division of condensed physics. At the meeting hold on November 18th, the participants agreed to establish the division with the support of more than 25 stakeholders. By the beginning of 2020, a working group consisting of members from five physical societies was established, and the preparations were started aiming at the establishment of the division by the end of 2020. The work divisions of tasks and the time table were clear and it seemed that things would go smoothly.

However, the worldwide epidemic of the new coronavirus has begun, and work has been disrupted. It was reopened in August 2020, with the fixing of the preparatory meeting for establishment for December 5. In a hurry, a declaration of establishment and the bylaws were drafted, but the work stopped from time to time due to the relapse of the new coronavirus. Due to the tenacious efforts of the parties concerned, an agreement was reached at the meeting hold on December 5, and an application for the division was submitted to AAPPS council. At the AAPPS council meeting held in December 2020, the proposal was approved. For the AAPPS president's request for approval by the member physical societies, by the end of 2020, more than four societies approved, and in January 2021, the DCMP was born.

The year of 2021 marks the 10th memorial of the Great East Japan Earthquake that hit Japan in 2011. There was no DCMP at that time, but many friends provided support to physics researchers in Japan. Since then, many disasters have hit the area, and from 2020, it has been hit by an epidemic of new coronavirus that has not been in history for decades. The DCMP organization is expected to play a major role in overcoming this crisis of international academic exchange and supporting the development of physics in coming future. As a member of the working group, I would like to once again give my respect and gratitude to those who have contributed to this historical event.



Professor Hiroyuki Nojiri (Vice Chair)
Institute for Material Research, Tohoku University

AAPPS President's Message

Congratulations on the establishment of the Division of Condensed Matter Physics (DCMP) of the Association of Asia Pacific Physical Societies, and welcome to our AAPPS community!

The idea to form AAPPS originated from the first Asia Pacific Physics Conference, held in Singapore in 1983, and the hope was to create an association of physical societies aimed at the promotion of physics in the Asia Pacific region. Seven years later, AAPPS was established in 1990 at the fourth APPC in Korea, and Chen-Ning Yang was the founding president. After 12th APPC held in Japan, we started to form divisions to boost communication and cooperation in research in various fields of physics. The first division was DPP, Division of Plasma Physics, followed by DACG, Division of Astrophysics, Cosmology, and Gravitation, and DNP, Division of Nuclear Physics.

AAPPS celebrated its thirtieth anniversary on the occasion of the 14th Asia-Pacific Physics Conference (APPC) held at the Borneo Convention Centre, Malaysia in November 2019. There these divisions organized sessions of their expertise which turned out to be highly successful. At the same time, we organized discussion meetings towards formation of divisions of condensed matter physics as well as particle physics. On behalf of AAPPS, I wish to appreciate those who attended the meeting and the executive committee members for their efforts which realized the new division.

Let us cooperate together toward the goal of promoting physics throughout Asia Pacific under the peaceful coexistence of all the relevant parties and make this world more civilized and comfortable to live in.

Professor Jun'ichi Yokoyama

The University of Tokyo
Hongo Bunkyo-ku, Tokyo 113-0033, Japan

From Editorial Desk

Dear Members,

We are priveledged to serve as the Editors of the Newsletter of the DCMP (Division of Condensed Matter Physics). It is particularly exciting to bring the very first issue of the DCMP Newsletter. We are thankful to all the EXCO members for their timely contributions. We are particularly thankful to Prof. Je-Geun Park and Prof. Hiroyuki Nojiri for their numerous valuable suggestions.

The present January-May 2021 issue forms the first issue after the formation of the DCMP on 1st January 2021. The Newsletter aims at networking the Asia-Oceania condensed matter physics communities, and improving their scientific interactions and cooperations. It has been decided to bring out two to three issues of the Newsletters per year. The current issue features Introduction of the EXCO Members, Reports from member associations, EXCO meeting reports, and the Yearly community calendar of events on condensed matter physics. Besides, the issue includes an article on “Towards the Starting up of the Division of Condensed Matter Physics”, contributed by Prof. Nojiri, one of the vice-chairs.

AAPPS president, Professor Jun'ichi Yokoyama’s message is also featured in this launching issue. Another important addition is the dedicated welcome message by chair for this 1st issue of the DCMP-AAPPS Newsletter. In future issues, it is planned to include technical articles highlighting some of the important scientific achievements/ developments in the region covering member associations.

We assure all our readers that our consistent efforts will be aimed towards increasing the visibility, impact, and the overall quality of Newsletter. In this regard, we look forward to your support and engagement to keep the Newsletter vibrant in the coming years. In the spirit of continuous improvement, any constructive input on streamlining our processes is very welcome.

On behalf of the DCMP, we wish all the members a happy and healthy year and all the good wishes.

Prof. Yaping Chiu (Editor)

Prof. S. M. Yusuf (Editor and Vice Chair)

Introduction of the EXCO Members

Prof. Je-Geun Park
Chair of DCMP

Prof. Je-Geun Park is currently a professor at the Department of Physics & Astronomy, Seoul National University. He got my B.Sc. and M.Sc. from Seoul National University in 1988 and 1990, respectively, before earning a Ph.D. from Imperial College, London, in 1993. He has since been working on strongly correlated electron systems and, more specifically, magnetism. His group specializes in using neutron and x-ray to probe the structure and dynamics of spin and lattice. More recently, he has pioneered a new field of magnetic van der Waals materials: which is known as vdW magnet and fast becoming a major vehicle for two-dimensional magnetism.

Prof. Hiroyuki Nojiri
Vice-Chair of DCMP

Prof. Hiroyuki Nojiri is a professor at the Institute for Materials Research, Tohoku University. He graduated Kyoto University in 1984 and got Dr degree in Physics from Osaka University in 1993. He has been working in magnetism and wide range of sciences related to high magnetic fields. He is an expert of THz ESR and neturon and X-ray scatterings in hign magnetic fields and is collaborating with many oversea researchers with his "flying magnet".

Prof. S M Yusuf
Vice-Chair of DCMP

Prof. S M Yusuf, D. Sc (Hon.) is a fellow of the Indian Academy of Sciences, and National Academy of Sciences, India, and currently he is the Associate Director, Physics Group of Bhabha Atomic Research Centre (BARC)-Mumbai, and Director, Institute of Physics, Bhubaneswar. He is also a Senior Professor in Homi Bhabha National Institute (HBNI), and Dean Students' affair, HBNI-BARC. He obtained his Ph D from University of Mumbai, India, and he was a post-doctoral fellow at Argonne National Laboratory, USA, and a visiting scientist at the Institute of Materials Science, Spain. He has expertise on advanced magnetic materials and neutron scattering. He has worked in the area of low dimensional magnetism, quantum magnetism, the phenomena of magnetization reversal and magnetic proximity effects, and molecular magnetism. He has executed collaborative research using the neutron scattering facilities at ILL-France, LLB-France, PSI-Switzerland, HMI-Germany, ANL-USA, and ISIS-UK. Besides, he has collaborated with the Kyoto Univ.-Japan, and The Catholic University of Korea. Presently, he serves as Vice-President of Materials Research Society of India, President of Neutron Scattering Society of India, Executive Committee member of Magnetics Society of India, Board member of The Asia-Oceania Neutron Scattering Association, and Indian Correspondent in Neutron News. He also served as the Vice-President of Indian Physics Association, and Vice President of Indian Crystallographic Association.

Prof. Kwang-Yong Choi
Secretary-General of DCMP

Dr. Kwang-Yong Choi is a full Professor of Physics at Sungkyunkwan University (SKKU). In 2004, he earned his Ph.D. in Physics from Aachen Technical University, Germany. Before coming to SKKU, he did postdoctoral research at IMR, Tohoku University, and National High Magnetic Field Lab, USA, and worked as a Professor at Chung-Ang University. Prof. Choi was a recipient of the Humboldt Fellowship in 2008 and serves as editorial boards of Crystals.
Prof. Choi's current research interests include Majorana fermions, quantum magnets, topological materials, and strongly correlated systems. By combining material design and state-of-art spectroscopies, he seeks to expand our understanding of quantum systems towards future technology as well as to braid Majorana anyons in Kitaev quantum magnets.

Professor Ya-Ping Chiu

Professor Ya-Ping Chiu
EXCO Member

Ya-Ping Chiu is a full professor at the Depa rtment of Physics in National Taiwan Univers ity, and an adjoint professor at the Institute of Physics of Academia Sinica in Taiwan. H er research interests mainly focus on surfac e science, interface science, nanoscience by using cross-sectional scanning tunneling micr oscopy and spectroscopy (XSTM/S). The cap ability of XSTM/S in her works is applied to explore the interface property in novel hete rostructures. For example, the spatially resolv ed XSTM/S has been improved to atomic sc ale at the oxide interfaces to identify a delic ate interplay of different correlated physical effects at the interfaces. In addition, the ato mically resolved XSTM technique combined with light illumination has also been demonst rated light-induced photoresponse at the hete rointerfaces and photo-driven dipoles reorderi ng on the key to the carrier separation in metalorganic halide perovskites. This researc h direction highlights the potential exploration of a direct atomically resolved access to el ectronic interface states for understanding th e intriguing interface properties at heterointerf aces or interlayer coupling between adjacent layers in materials.

Education and working background:

Aug. 2016 ~ : Professor, Dept. of Physics, National Taiwan University, Taiwan
Jun. 2012 ~ Sep. 2012: Visiting Scholar, Forschungszentrum Juelich, Germany
Apr. 2006 ~Jul. 2006: Postdoctoral Researcher, Academia Sinica, Taiwan (Atomic and Molecular Sciences)
Jul. 2005 ~ Mar. 2006: Postdoctoral Researcher, Academia Sinica, Taiwan (Physics)
Aug. 2000 ~ Jul. 2005: PhD degree in Physics from National Taiwan Normal University
Aug. 2001 ~ Jul. 2005: PhD study in the institute of Physics, Academia Sinica, Taiwan

Dr. Li Lu
EXCO Member

Dr. Li Lu is a researcher in the Institute of Physics, Chinese Academy of Sciences (IOP, CAS). He obtained a B.S. degree from Nanjing University in 1982 and a Ph.D. from IOP in 1992. He was a visiting scientist at UC Berkeley during 1992-1995, and became a full professor of IOP in 1996. Dr. Li Lu is an experimentalist specialized in electron transport in low-dimensional materials and mesoscopic devices. He ever developed a 3 omega method for measuring the specific heat and thermal conductivity of nanowires, and jointly discovered the quantum anomalous Hall effect in a Chern insulator. His current research interest is on topological quantum states and devices at ultralow temperatures. Dr. Li Lu was the founding director of the Laboratory for Physics under Extreme Conditions, IOP during 2000-2005, the director of the Laboratory of Solid-state Quantum Information & Computation, IOP during 2009-2017, the deputy director general of IOP during 2006-2012, and the founding director of the IOP Huairou campus with Synergetic Extreme Conditions User Facility since 2020.

Prof. Vandana Nanal
EXCO Member

I am currently a professor at the Department of Nuclear and Atomic Physics, Tata Institute of Fundamental Research (TIFR), Mumbai (India) and a General Secretary of Indian Physics Association. I got my Ph.D. from TIFR in 1994 and my thesis work was focused on measurement of compound nuclear lifetimes using crystal blocking technique. My research interests cover a broad spectrum ranging from nuclear physics, accelerator physics to interdisciplinary areas with a particular emphasis on development of detectors and associated instrumentation. I am presently working on development of cryogenic tin bolometer for search of neutrinoless double beta decay. We have indigenously developed neutron transmutation doped Germanium sensors for mK thermometry.

Prof. Toru Sakai
EXCO Member

I am currently a professor at Graduate School of Science, University of Hyogo. I am also a group l eader at Condensed Matter Theory Group, Nation al Institutes for Quantum and Radiological Science and Technology (QST) at SPring-8. I got my B.Sc ., M.Sc. and Ph.D from University of Tokyo in 19 87, 1989 and 1992, respectively. I have been wor king on strongly correlated electron systems and f rustrated magnetism. My group specializes in usin g large-scale numerical diagonalization of the frust rated quantum spin systems, using supercomputers like Fugaku

Professor Hai-Hu Wen
Auditor of DCMP

Professor of physics in Nanjing University, Yangtze River Scholarship Professor, American Physical Society Fellow, Director of Center for Superconducting Physics and Materials of Nanjing university.

Working field: Fundamental research on superconductivity, exploration of new superconducting materials, investigation on non-Fermi liquid behavior, unconventional pairing mechanism of cuprates and iron pnictide superconductors, vortex dynamics, mixed state properties, critical fluctuation, etc. Published more than 400 scientific papers in internationally recognized and peer reviewed journals, received over 10000 citations, h-index 53. Delivered more than 100 speeches or invited talks at international conferences.

Education and working background:

1. *March 1988 -- March 1991 Obtained the Ph.D. from Chinese Academy of Sciences.*
2. *Oct. 1991 -- Oct.1993, Post-Doctor in Vrije Universiteit, Amsterdam.*
3. *Aug. 1996 – Dec.2010, Professor in Institute of Physics, Chinese Academy of Sciences.*
4. *Oct. 1996 -- April 1998, Alexander von Humboldt fellow in Ulm university, Germany.*
5. *Oct. 2000—Sept. 2009, Director of the National Lab for Superconductivity, Chinese Academy of Sciences.*
6. *Oct.10, 2003—Dec.16 2003, Physics Department, University of Tennessee, Visiting Scholar.*
7. *Jan. 2011—present, Professor of Nanjing University*

Awards received:

1. *Received Outstanding Chinese Young Scholar's foundation by Natural Science Foundation in China (NSFC) in 1998.*
2. *2004, National Award for Natural Science (second grade, order No#1)*
3. *2009, Award of Hong Kong Qiu Shi Science & Technologies Foundation*
4. *2010, Achievement in Asia Award (Robert T. Poe Prize) by Oversea Chinese Physical Association*
5. *2012, Chang Jiang Scholarship professor*
6. *2013, APS fellow*
7. *2013, National Award for Natural Science (first grade, order No# 4)*

Prof. Feng-Chuan Chuang
Associate Auditor of DCMP

Prof. Feng-Chuan Chuang graduated from National Taiwan Normal University with a B.S. in Physics in 1997. He obtained his M.S. and Ph.D. in Condensed Matter Physics at Iowa State University in 2003 and 2005, respectively.
He is a distinguished professor in the Department of Physics, National Sun Yat-sen University. Prof. Chuang was given the National Sun Yat-sen University Young Scholar Award in 2010 and again given the University Outstanding Research Award 2016. He served as the chairman of the Physics department from 2014/8~2016/7 and hosted the 2016 annual meeting of the Physical Society of Taiwan. He received the Excellent Young Scholar Research Grant of the Ministry of Science and Technology in 2018. He is also a center scientist at National Center for Theoretical Science
His research interests include condensed matter physics, computational materials physics, surface science, first-principles calculation, quantum spin Hall effect, topological materials, and genetic algorithm.

Reports from Member Associations

中国物理学会
Chinese Physical Society

Brief Introduction to the CPS

The Chinese Physical Society (CPS) was established in 1932. Its purpose is to promote the development and popularization of physics in China. The executive president is Prof. Jie Zhang. The CPS consists of~ 40000 individual members; 8 working groups, covering Academic Exchanges, Science and Technology Popularization, Publications, Physics Education, Physics Nomenclature, Consultation, Women in Physics, International Exchanges. It has 31 specialized committees, including High Energy Physics, Nuclear Physics, Plasma Physics, Atomic and Molecular Physics, Optical Physics, Condensed Matter Physics and Statistical Physics, Semiconductor Physics, etc. Under the flag of CPS, more than 100 conferences and workshops will be organized each year.

The web-link of CPS is

http://www.cps-net.org.cn/Home/Index/index

The Indian Physics Association (IPA)

The Indian Physics Association (IPA) was founded in 1970 (www.tifr.res.in/~ipa1970) with the founding president Late Dr. B.M. Udgaonkar and is a major forum for physicists in India. It presently has 45 chapters in India and has more than 4,300 members spread all over India and abroad with head office being located at Bhabha Atomic Research Center, Mumbai 400085 (Email:ipa.india@gmail.com). The main aim and objectives of IPA are to disseminate information in the field of physics by publication of bulletins, reports, newsletters incorporating contemporary research and teaching ideas, and also by arranging special programmes for students. More information can be found on the website www.tifr.res.in/~ipa1970. The IPA organises regular lecture series aimed at acquainting young researchers with latest developments. The IPA also gives biennial awards in recognition of specific achievements and significant contributions to the field, for both young and senior scientists. The IPA extends partnerships to national/international conferences of interest to physics community.

The IPA liaises with other international societies like APS, IOP(UK), SIF (Italy) and AAPPS. The IPA-IOP Bhabha-Cockroft-Walton exchange programme is successfully being organized for over 2 decades. At national level, amongst various professional bodies, the IPA liaises with all three major science academies, namely, Indian National Science Academy (INSA), National Academy of Science in India (NASI) and Indian Academy of Sciences (IAS).

The executive committee of IPA is the governing body with a two year term and is headed by the President, IPA. Presently Prof. S. Ramakrishnan (Director, TIFR, Mumbai) is president and Prof. Tanusri Saha-Dasgupta (S N Bose Center, Kolkata) is Vice-president for a period 2021-2022 after completion of the tenure of Dr. Ajit K. Mohanty (Director, BARC) and Dr. S. M. Yusuf (Associate Director, Physics Group, BARC, and Director, Institute of Physics) as the President and Vice President, respectively. Some of the notable past presidents are : Dr. Raja Ramanna, Dr. P.K. Iyengar, Prof. B.V. Sreekantan, Dr. Yash Pal, Dr. R. Chidambaram, Dr. B.A. Dasannacharya, Prof. N. Mukunda, Prof. V. Singh, Prof. Bikash Sinha, Prof. M.K. Sanyal and Dr. D. Kanjilal.

The IPA regularly publishes Physics News-quarterly bulletin of IPA and has also published several books as well as monographs on a wide range of topics in physics. The IPA commemorated the completion of its Golden Jubilee in 2020-21 and it launched few new initiatives during the pandemic period, accessible not only to IPA members but also to general physics community. Some of these commemorative events of 50th year of IPA were organized in collaboration with APS.

To address a pertinent issue of gender imbalance in STEM, and particularly that in physics, the IPA has established Gender Working Group in Physics (GIPWG) in 2017. This group held a conference “Pressing for Progress” in 2019 at University of Hyderabad, which showcased science done by women physicists in India and deliberated on various issues which affect women at various stages of the career. A set of recommendations was evolved for working towards gender parity in physics profession. One of the unique recent initiatives of IPA was a special all women author Physics News issue in 2017 March.

India has been closely associated with AAPPS. The second Asia Pacific Physics Conference (APPC) was hosted by Prof. S Chandrasekhar, FRS at Bangalore in 1986. Prof. S. Chandrasekhar from India served as the members in the first Council of AAPPS. IPA is happy to be associated with the DCMP of AAPPS and congratulate this initiative. The condensed matter physics is one of the main research areas

in the country and is rigorously pursued across the nation in various research centers under Department of Science & Technology Institutes, Department of Atomic Energy Institutes, IISc (Bangalore), IITs, IISERs, CSIR institutes, Universities, etc. The research activities span a wide range of topics:

- *Nanomaterials, quantum materials, Energy materials, 1D/2D materials*
- *Photonics, optoelectronics*
- *Magnetism, superconductivity and spintronics*
- *Soft condensed matter and biological systems*
- *Phase transitions & dynamics*
- *Surfaces, interfaces, thin films, glasses & amorphous systems*
- *Computational methods, electronic structure*
- *Single crystal growth and characterization*
- *Semiconductor physics*

The country hosts many large scale facilities for carrying out research in the area of condensed matter physics. These facilities include INDUS synchrotron radiation facility at RRCAT, Indore (Indus 1: 450 MeV, 100 mA & Indus 2: 2.5 GeV, 200 mA), National facility for neutron beam research at BARC, Mumbai, and Ion beam facilities for modification and characterization of materials at IUAC, New Delhi, etc. There are also several high performance computing facilities for advanced computational studies. Recently, Government of India has announced special initiatives for emerging fields like Quantum Science and Technology, formation of Quantum Hubs across the country and National Mission on Supercomputers to build petaflop machines in different corners of India. A Free Electron Laser facility for THz radiation- Delhi Light Source (DLS) is under development. Such indigenous development of state of the art facilities and instruments has been an important factor in R&D efforts in India. A separate center to facilitate use of major DAE facilities, UGC-DAE consortium for scientific research has been set up at Indore and at three other cities in the countries. Many societies like Indian Crystallographic Association (ICA), Neutron Scattering Society of India (NSSI), Magnetic Society of India (MSI), Materials Research Society of India (MRSI), Society for Materials Chemistry (SMC) have evolved over the years to facilitate interactions and knowledge exchange amongst condensed matter physics researchers.

A major national forum and one of the oldest symposia is the DAE Solid State Physics Symposium is held annually. This has ~ 1000 participants which includes 600+ students. Some of the other series conferences are : International Conference on Nano Science and Technology (ICONSAT, biennial), International Conference on Magnetic Materials and Applications (ICMAGMA, annual) Interdisciplinary Symposium on Materials Chemistry (ISMC, biennial), Conference on Neutron Scattering (CNS, biennial), Ion Beams in Materials Engineering and Characterization(biennial), Nanostructuring with Ion Beams (biennial), Meeting for Quantum condensed matter(Q-Mat, annual), International biennial series in semiconductors – Physics of semiconductor devices and emerging electronics on alternate years. Recently, following International series conferences in the area of Condensed matter physics were hosted in India

- International workshop on emergent phenomena in quantum hall systems (2016)
- Topological aspects of Quantum Matter (2018)

Prof. Vandana Nanal

General Secretary, IPA

Introduction to The Physical Society of Japan

The Physical Society of Japan (JPS) has a membership of about 16,000, including research scientists, engineers, teachers, students and citizens, inside and outside of Japan. Its chief objectives are to publish the research output of latest achievement of physics and to hold Annual Meetings to promote members' research activities. About 40% of the JPS members are working in universities, 11% in private corporations, 11% in public research institutes. and 16% of the members are graduate and undergraduate students.

The JPS is the direct successor of the Tokyo Mathematics Company which was founded as Japan's first academic society of natural sciences, in 1877. Its name was changed to the Tokyo Mathematico-Physical Society in 1884 and then to the Physico-Mathematical Society of Japan in 1919. In addition to being one of the global forerunners of such academic societies, the Mathematics and Physics Journal had been published in a European language from its fourth volume (1888-1891), demonstrating the earliest members' strong international orientation. With such vision and the fruits of research that it conveyed to the wider audience, it is no exaggeration to say that the Tokyo Mathematics Company was one of the leading agencies of Japanese modernization.

In 1946, the Physico-Mathematical Society of Japan dissolved itself, and two new societies, the Physical Society of Japan (JPS) and the Mathematical Society of Japan were established. The members continued to conduct world-class, cutting edge research, resulting in the awarding of the Nobel Prize in Physics to Hideki Yukawa in 1949 and Shin'ichiro Tomonaga in 1965. Such happy news created a science fever among the Japanese nation, leading many young students to the field of physics. Today as of 2021, the JPS has about 16,000 members, and 11 members awarded the Nobel Prize in Physics and 3 members in Chemistry. It is among the core institutions of physics research in Japan, which is among the world's leading nations in the field.

Now the JPS has signed agreements with its many oversea counterparts (totally 11 societies) so that members of each body could participate in other bodies and enjoy the rights and privileges of those bodies. Contribution to operation of Association of Asia Pacific Physical Societies (AAPPS) is now important activity of the JPS. Recently, the need for cooperation and/or collaboration among Asian physicists has increased substantially in many fields of physics, primarily because Asian contribution to physics is now extremely important and globally visible. Therefore, to establish AAPPS as a true union for all Physical Societies in the Asian and Pacific regions is essentially important for the future of world physics community. The JPS fully support the establishment of the condensed matter physics division in AAPPS.

The JPS discusses the direction for the education of physics to be taken, and on the basis of those discussions it makes recommendations and requests to relevant institutions and government agencies. It also organizes international conferences, exchanges information and cooperates with physics societies abroad as well as with international academic bodies and research institutes. The JPS thus plays an important role in the development and progress of physics both domestically and internationally.

The JPS publishes monthly Journal of the Physical Society of Japan(JPSJ), which reports research results in all fields of physics, with strong submissions in condensed matter physics and statistical physics. As another academic publication, the JPS launched a new international journal, Progress of Theoretical and Experimental Physics (PTEP). PTEP is an interdisciplinary

journal that publishes articles on theoretical and experimental physics. PTEP is the successor to Progress of Theoretical Physics (PTP) , which was terminated in December 2012 and was merged into PTEP in January 2013. PTEP is a fully open access, online-only journal. In addition, the JPS launched a new full open access journal, JPS Conference Proceedings (JPS Conf. Proc.) in 2014. It provides a fast publication of proceedings of an international conference, workshop, summer school or symposium, consisting of peer-reviewed articles. More recently, the JPS launched a new intelligible journal "JPS Hot Topics" on March 2021, in which high profile research papers published in these journals are introduced.

The Physical Society of Japan (JPS) organizes two major academic meetings in spring and fall each year over a period of four days, where the members gather to present their research results and make discussions. Annual Meeting is held once a year (usually in spring) for all the fields of physics. The Fall Meeting (when the Annual Meeting is held in fall, there is a Spring Meeting) is held at two different venues, one covering the fields of condensed matter physics and other fields, and the other covering the fields of elementary particle physics, nuclear physics, cosmic rays/astrophysics, and beam physics. At each meeting, as many as 5,000 researchers and students participate, and about 4,000 presentations are performed. The ratio of the members of condensed matter physics is estimated to be 2/3 from the participants of the fall meetings.

The JPS sincerely hope to work with the division for condensed matter physics in AAPPS to strengthen the exchanges, collaborations and partnerships among physics researchers in Asia-Pacific area.

Prof. Setsuko Tajima, JPS president

DCMP
Division of Condensed Matter Physics
Association of Asia Pacific Physical Societies

KPS 한국물리학회
The Korean Physical Society

Korean Physical Society

Professor Jae-Hoon Park, Chairman of DCMP in Korean Physical Society

Greetings from South Korea!!

As a chairman of the division, I am very glad to have the opportunity to introduce the division of condensed matter physic (DCMP) in Korean Physical Society (KPS). In 1968, our division started as a division of solid state physics and it becomes the biggest division among eleven divisions in KPS with 1446 members (348 Fellows and 1098 Members) as of April 2021.

Our main activity is to offer opportunities for academic activities such as research presentation and networking at two regular KPS meetings in April and October every year. At each meeting, there are about 250 presentations in our division, including invited, oral, and poster presentations. Moreover, the representative international workshop, Quantum Materials Symposium (QMS), is held in every winter since 2012, supported generously by several organizations in South Korea including Asia Pacific Center for Theoretical Physics, Korea Institute for Advanced Study, and Institute for Basic Science.

The DCMP also make vigorous efforts on educations of graduate students by organizing the condensed matter summer school in every summer since 2009. Each year, pedagogical lectures on several selected topics are provided by prominent leading scientists for 3-4 days. In 2021, the winter school was launched to provide in-depth lectures on a focused single topic for 9 hours during two days.

To envision great progresses of condensed matter physics, we will make continual efforts to promote activities in the field of condensed matter physics in the Asian pacific region by collaborating with AAPPS closely. At the same time, we warmly welcome members of AAPPS to join our activities in DCMP at KPS. We hope that you have both a chance to introduce your recent research at the KPS/QMS meetings and an opportunity of strong networking with the colleagues in our division.

The Physical Society located in Taipei

History and Present Status

Our society was founded as The Physical Society of the Republic of China (PSROC) on June 15, 1958; its name was changed to The Physical Society of Taiwan in 2018. We joined AAPPS as The Physical Society located in Taipei (TPS). TPS is a growing society – we have around 1,800 members in 2020, which is more than doubled that in 2001.

Our mission is to pursuit the progressive development and popularization of the physical sciences in Taiwan – in both scientific research and education, and to promote international communication and participation. In recent years, we pay attention to the policies of science and technology and economic innovation – emphasizing the impart of fundamental research on industrial transformation and promoting communication with industry.

The society has a board of 21 directors and 5 supervisors, all of whom are teaching and research personnel of universities or research institutes. TPS is also a well-organized and active civil social organization. We have four divisions and six committees under the board of directors to efficiently promote activities beneficial to academic affairs, including journal and magazine publication, promotion of women in physics research, the Annual Meeting of the Society, the public affairs forum, the promotion of educational activities in physics, and the development of international affairs. The divisions and committees include: Division of Academy (responsible for academic activities and selection affairs), Division of Development (underneath which are International Affairs Committee, Physics Education Committee, Committee on Women in Physics, and Public Affairs Committee), Division of Publication (underneath which are the Chinese Journal of Physics Editorial Board, the Bimonthly Editorial Board, and the Network Working Group), and Division of Finance and Personnel.

The society also sets up the divisions for specialized fields. The mission of the specialized divisions is to promote international collaboration and participate international affairs. The first division, the Particle and Field, was founded on September 9, 2020. Other specialized field divisions are being organized. The society also sets up the Student Chapter under the Division of Academics on February 2, 2021. The mission of the Chapter is to provide students the opportunity to participate in physics-related public affairs and to strengthen the connection with physics students abroad.

TPS has two regular publications: the Chinese Journal of Physics (an academic journal founded in 1963) and the Physics Bimonthly (a magazine founded in 1979). We are dedicated to improving the quality of academic research papers in the Chinese Journal of Physics as well to promoting physics and popular science education in Taiwan. For example, Physics Bimonthly is a high-quality magazine in all aspects, from contents to editing and art design; its subscribers already include general public. At the same time, TPS holds many educational activities and academic seminars, including its own Annual Meeting, the well-recognized 2005-Year-of-Physics activities, and “Taiwan Night”, which connect all Taiwanese scholars around the world.

In international participation, TPS has signed bilateral agreements with 17 academic societies, including American Physical Society (APS) and Physical Society of Japan (JPS). TPS has also been a long-time participant in international organizations, such as International Union of Pure and Applied Physics (IUPAP) and the Association of Asia Pacific Physical Societies (AAPPS). In 2017, TPS became the first foreign member of American Institute of Physics (AIP).

EXCO Meeting Reports

When Asia-Pacific Physics Conference 2019 was held in Malaysia, there was the call for establishing a condensed matter physics division upon the initiative of the council of the Association of Asia Pacific Physical Society (AAPPS). Since then, condensed matter physics communities across the Asia-Pacific region have conducted voluntary actions and preparation meetings to form the Division of Condensed Matter Physics (DCMP), despite the Covid-19 pandemic.

On November 23, 2020, the preparation meeting of Condensed Matter Physics in the Asia-Pacific Area.

- The meeting was called to finalize drafts of the documents (bylaw, organization, committee members, declaration of the founding, application form to AAPPS) required for the founding of DCMP in AAPPS.
- At the preparation meeting, Prof. Je-Geun Park of KPS has been elected as the Chair of DCMP. Later, on December 21, 2020, Prof. Hiroyuki Nojiri of JPS and Prof. S. M. Yusuf of the Indian Physics Association have been elected as the Vice-Chairs by an email vote.

On December 5, 2020, the round table was held online to approve the founding of the Division of Condensed Matter Physics (DCMP) in AAPPS.

- 10 representatives from five societies (CPS, Indian Physics Association, KPS, the Physical Society located in Taipei, JPS) and one observer (JSAP) joined the meeting.
- Representatives reported condensed matter activities of each society.
- All attendants agreed on the founding of the DCMP and approved the required documents for applying for the DCMP formation (bylaw, application form, declaration of the founding). The bylaw and the call for the declaration of the founding were subsequently revised by circulation.

On December 21, 2020, 1st Bimonthly Executive Meeting (Chair, vice-chairs meeting)

The - AAPPS council approved the application of the DCMP on December 15, 2020. All 29 founding members' signatures have been collected.

- Prof. Hai-Hu Wen of CPS and Prof. Feng-Chuan Chuang of the Physical Society located in Taipei have agreed to serve as the Auditors of DCMP. Prof. Kwang-Yong Choi of KPS was appointed as Secretary-General to work on the DCMP website and logo.

On December 30, 2020, the DCMP in AAPPS was formally approved by the AAPPS council meeting.

- 30 founding members signed the declaration of the founding DCMP. The DCMP was officially approved by the AAPPS as its new division. The DCMP officially started on January 1, 2021.
- At the time of the establishment of the DCMP, members of the executive committee (EXCO) have been appointed and will serve for the term 2021-2020 (1st Jan 2021- 31 Dec 2022).

• Chair: Je-Gen Park (KPS)

• Vice-Chair: Hiroyuki Nojiri (JPS), S. M. Yusuf (Indian Physics Association)

• Auditor: Hai-Hu Wen (CPS)

• Associate Auditor: Feng-Chuan Chuang (the Physical Society located in Taipei)

• Secretary-General: Kwang-Yong Choi (KPS)

• Members of the EXCO: Ya-Ping Chiu (the Physical Society located in Taipei), Li Lu (CPS), Vandana Nanal (Indian Physics Association), Toru Sakai (JPS)

On January 2, 2021, 2nd Bimonthly Executive Meeting, and on February 6, 2021, 1st EXCO Meeting

- The temporary website (http://aapps-dcmp.imr.tohoku.ac.jp/eng/index.html) has been opened to promote their society members' participation in the DCMP. For six years, there will be no membership fee.
- The DCMP official email account (dcmp.aapps@gmail.com) has been created, and all documents were deposited for access to the DCMP members. A temporal mirror site will be prepared for seamless file sharing.
- The APCTP granted 7 million KRW for an academic event and 2 million KRW for non-specified activities to the DCMP.
- We will issue the Newsletter three times (March, July, and December) in 2021 under the leadership of the vice-chair S. M. Yusuf. Ya-Ping Chiu has agreed to serve as an editor. The newsletter will be published online and the EXCO members will check proof of the newsletter prior to its online release.
- Job assignments have been made on five categories: Meetings (J.-G. Park), Organization (H. Nojiri/Kwang-Yong Choi), Academic Activity (S. M. Yusuf), Strategy and Others (J.-G. Park).
- To foster academic exchange between the member societies, each society's event calendar should be shared, and joint activities should be arranged. The 2021 Yearly Planner has been posted on the web: https://drive.google.com/file/d/1qZ47qrF7k3kvlfONwdDCvSlN8Z83LR3c/view?usp=sharing

EXCO Meeting (On line) February 6, 2021

Community calendar

We are having the executive meeting consisting of two vice-chair and secretary-general every two months. Besides, we have the EXCO meeting every three months. We currently plan to hold a small gathering of the DCMP in November in Korea if the pandemic situation gets better for international travel. In August, we will have the first joint meeting with the condensed matter division of the European Physical Society in Manchester in late August.

Event Calendar

Date	Event	Location	URL
2021.01.27-29	2021 Annual Meeting of TPS	Taoyuan	https://tps2021.conf.tw/site/page.aspx?pid=901&sid=1352&lang=en
2021. 03.12-15	JPS Annual Meeting 2021	Online	https://www.jps.or.jp/english/meetings-and-awards/annual/annual-index.html
2021.04.21-23	Korean Physical Soceity, Spring Meeting 2021	Online	http://www.kps.or.kr/conference/event/
2021.05.11-13	The International Conference on Quantum Liquid Crystals	Online	http://qlc.jp/en/2020/11/26/qlc2021/
2021.05.24-25	Siam Physics Congress 2021	Online	https://spc2021.sci.psu.ac.th
2021.07.12-14	18th Conference of the New Zealand Institute of Physics	Wellington	https://nzip.org.nz/nzip-physikos-2021-conference-12-14-july/
2021.07.27-30	Interdisciplinary Topics in Advanced Materials	Online	ITAM Organizers <itamorganizers@gmail.com>
2021.09.10-13	The Japan Society of Applied Physics Autumn Meeting 2021	Nagoya	http://www.jsap.or.jp/english
2021.09.16	2020/2021 Fall meeting of Chinease Physical Soceity, Beijing	Gansu province	TBA
2021.09.20-23	Physical Soceity of Japan, Fall Meeting Condensed Matter Physics	Tokyo or Online	https://www.jps.or.jp/english/
2021.09.21-25	The third Workshop on Spin-Orbit Coupled Topological States	Online	https://www.phys.sinica.edu.tw/~socts2020/
2021.10.10-14	The 12th Recent Progress in Graphene and Two-dimensional Materials Research Conference	Seoul &Online	http://rpgr2021.org/

2021.10.20-22	Physics Conference and Annual Meeting of Physilca Soceity of the Philippines	Online	https://spp-online.org/first-call-spp2021/
2021.10.20-22	Korean Physical Soceity, Fall Meeting 2021	Seoul & Online	TBA
2021.11	Female Scholars Symposium	TBA	TBA
2021.12.8-11	Quantum Condensed Matter (Q-MAT 2021)	TIFR Mumbai, hybrid mode	https://www.tifr.res.in/~Qmat/
2021.12.14-17	The XXIth International Workshop on the Physics of Semiconductor Devices (IWPSD 2021)	IIT Delhi Off line mode	http://www.iwpsd2021.iitd.ac.in/
2022.01-02	Annual Meeting of The Physical Soceity located in Taipei	TBA	TBA
2022.01.24-26	2022 Annual Meeting of TPS	Taipei	TBA
2022.03.15-18	Physical Soceity of Japan, Annual Meeting 2022	Okayama	https://www.jps.or.jp/english/
2022.12.05-09	The 24th Congress of Australian Institute of Physics	TBA	https://aip.org.au/

The DCMP membership application

To obtain the full benefit of the DCMP, please apply the membership. There is no membership fee and is free. There are two types of memberships in the DCMP

1. Regular member: Scientist who has a Ph.D. degree in physics or related areas or equivalent qualifications and agrees with the DCMP's purpose.
2. Associate member: Person who had a university-level education in physics or related area

The main target of the associate member is the PhD students.

Members can participate in the range of the DCMP activities and can receive the news letters. A membership card showing your status will be supplied after the logo of the DCMP was fixed. Currently, you can apply the membership at a tentative DCMP website. We hope that you and members of your group to join the DCMP.

http://aapps-dcmp.imr.tohoku.ac.jp/eng/index.html