



Detectability index (d-prime)

2D TTF

blurred with TTF

Task image

d' image

2D NPS

add noise from NPS



Global Impact of UNDIP Medical Physics Innovators: IndoQCT CT-Scan Software Downloaded in More Than 90 Countries

Universitas Diponegoro (UNDIP) officially launched IndoQCT v26d: Software for Evaluating the Quality of Computed Tomography Images on January 10, 2026. Broadcast via the Official UNDIP Physics YouTube channel, the launch marked a significant advancement in automated, objective, and efficient CT image quality evaluation. The software is designed to assist medical physicists in conducting faster and more accurate CT quality control, while also serving as a valuable research and educational tool in medical physics and radiology.

The fourth-generation software introduces major upgrades, including detectability index measurements using NPW and NPWE models, human observer modules (AFC, ROC, and LROC), integrated DICOM database storage, and an enhanced user interface. Prof. Heri Sutanto emphasized the broader impact of the innovation, stating, "This development reflects UNDIP's long-term commitment to producing scientific innovations that are not only academically strong but also clinically applicable and globally relevant."

Developed to overcome the limitations of conventional CT quality control—often manual, time-consuming, and prone to subjective bias—IndoQCT v26d offers automated and standardized measurements to optimize radiation dose and enhance patient safety. "With IndoQCT, CT image quality evaluation can be performed automatically and objectively, enabling safer and more efficient imaging practices," explained Dr. Choirul Anam, one of the lead developers from UNDIP.

In collaboration with PT Quarta Medika Indonesia (QMI), UNDIP has brought IndoQCT into the commercialization stage, expanding its application in clinical and research settings. The software has contributed to approximately 95 scientific publications in leading international medical physics journals and has been downloaded in more than 90 countries. This milestone underscores UNDIP's capacity to translate research excellence into practical medical technology with global impact.



(Source: undip.ac.id)

SUSUNAN REDAKSI

Penanggung Jawab | **Dr. Nurul Hasfi, S.Sos., M.A.**
 Wakil Penanggung Jawab | **Ratna Wahyu Setyaningtyas, S.H., M.Si**
 Redaktur Pelaksana | **Utami Setyowati, S.S., M.I.Kom**
 Wakil Redaktur Pelaksana | **Astri Winarni, S.H., M.H.**

Editor | **Hariyani, S.Sos., M.I.Kom | Indra Bayu Adji, S.I.Kom | Hanang Tri Asnawi, S.S | Qori Safa Nurzikha**
 Reporter - Fotografer | **Titis Dyah Hapsari, S.Hum | Dhany Dimas Oktriyanto, S.I.Kom**
Rr. Diah Hermiati Warastuti, S. I.Kom | Sidiq Ariyadi, S.Sn | Audy Evan Daffa Ramadhan
 Desain Grafis | **Rahadyan Wishnu Byantoro, S.Hum** Email | **redaksi.humas@live.undip.ac.id**

UNDIP Antawirya Team Achieves Global Recognition, Represents Asia at the 2027 Shell Eco-Marathon World Championship



Universitas Diponegoro (UNDIP) once again showcased its international competitiveness through the outstanding performance of the Antawirya Team at the Shell Eco-marathon Asia-Pacific and the Middle East 2026, held at the Lusail International Circuit in Doha, Qatar, from January 21–25, 2026. Competing against 82 teams from various countries, Antawirya UNDIP secured 2nd Place in the Prototype Internal Combustion Engine (ICE) category and 4th Place in the Prototype Battery Electric (EV) category, while also qualifying for the World Championship Shell Eco-marathon 2027.

UNDIP fielded two teams—Antawirya Rodhan ICE and Antawirya Rodhan EV—in the Prototype class. The ICE team achieved an exceptional fuel efficiency of 1,090 kilometers per liter, the highest gasoline efficiency in its category, while the EV team recorded 745 kilometers per kWh. These achievements reflected innovative vehicle design, precise energy management strategies, and rigorous technical preparation through extensive testing and race strategy development.

Rector Prof. Dr. Suharnomo, S.E., M.Si., expressed his appreciation for the accomplishment. “The success of the UNDIP Antawirya Team at Shell Eco-marathon 2026 proves that UNDIP students are capable of competing and being recognized at the global level. This achievement is not only a source of pride for the university, but also for Indonesia. UNDIP will continue to support student research and innovation, particularly in environmentally friendly technologies aligned with sustainable development goals,” he stated.

Team advisor Dr.-Ing. Ir. Paryanto, S.T., M.T., IPM., ASEAN Eng., emphasized the collaborative effort behind the success. “The achievements of the UNDIP Antawirya Team are the result of hard work and strong support from many parties,” he said, thanking IKA UNDIP Qatar and other stakeholders. Team Leader Fivananda Muhammad Bintang Haramain added, “Being declared qualified for the World Championship 2027 is a historic moment for Antawirya UNDIP. Next year, we will not only represent UNDIP and Indonesia, but also Asia on the world stage.”



(Source: undip.ac.id)



UNDIP Officially Becomes a Partner of the Ministry of Health’s RSPPU, Strengthening Its Commitment to the Implementation of Asta Cita and National Health Transformation

Universitas Diponegoro (UNDIP) has officially been appointed as a Partner University in the Ministry of Health’s Main Teaching Hospital Program (RSPPU). The appointment was marked by the signing of cooperation agreements on the provision of specialist and subspecialist doctors with RSUD Margono Soekarjo Purwokerto and RSUD Dr. Moewardi Surakarta. This collaboration strengthens UNDIP’s strategic role in supporting national health development and represents a concrete implementation of the Asta Cita health agenda in line with the Ministry of Health’s National Health Transformation under the six pillars of health system reform.

The agreement was signed by the Rector of Universitas Diponegoro and the Directors of both regional hospitals, witnessed directly by the Minister of Health of the Republic of Indonesia and key officials from the Central Java Provincial Government and the Ministry of Health. The partnership focuses on enhancing the role of RSPPU in ensuring the availability and equitable distribution of specialist and subspecialist doctors, particularly under the Health Human Resources Transformation pillar.

In his remarks, the Minister of Health expressed strong appreciation for UNDIP’s contribution in translating health transformation policies into concrete regional action. “Health transformation cannot run without strengthening human resources. The RSPPU program is essential because it not only increases the number of specialist doctors, but also ensures equitable distribution and long-term sustainability of health services in the regions,” the Minister stated.

Meanwhile, the Rector of Universitas Diponegoro affirmed that the collaboration also reinforces the Health Governance Transformation pillar through integrated and accountable cooperation among universities, hospitals, and regional governments. He emphasized UNDIP’s commitment to maintaining high academic standards and quality clinical education aligned with national and regional health needs. Through this partnership, UNDIP contributes to advancing Asta Cita in the health sector and supporting the Sustainable Development Goals (SDGs), particularly SDG 3, SDG 4, and SDG 10.



(Source: undip.ac.id)



Supporting the Equitable Distribution of Specialist Doctors, UNDIP's Faculty of Medicine Sends Residents to Disadvantaged, Frontier, and Outermost Regions

The Faculty of Medicine at Universitas Diponegoro (FK UNDIP) has established a strategic partnership with Pemangkat Regional General Hospital (RSUD Pemangkat) in Sambas Regency for the deployment of residents from the Physical Medicine and Rehabilitation Study Program to disadvantaged, frontier, and outermost (3T) regions. Initiated on January 15, 2026, the collaboration reflects UNDIP's commitment to supporting equitable medical education and strengthening healthcare services in priority areas.

The partnership began with a visitation by FK UNDIP to assess the hospital's readiness in terms of facilities, human resources, service systems, and clinical education safety standards. The visit also facilitated dialogue between UNDIP, the local government, and RSUD Pemangkat to ensure alignment between regional healthcare needs and the implementation of quality clinical training for residents.

Vice Dean for Academic and Student Affairs, dr. Muflihatul Muniroh, M.Si., Med., Ph.D., emphasized the broader mission behind the initiative. "Sending residents to 3T regions reflects the strategic role of higher education institutions in fulfilling the Tri Dharma of Higher Education, particularly in education and community service," she stated. The program is designed not only to strengthen residents' competencies but also to provide tangible contributions to improving local healthcare services in Sambas Regency.

Through structured and sustainable collaboration, FK UNDIP highlighted the importance of cross-sector support to ensure proper supervision and safety for residents during their clinical education. This initiative aligns with the Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships), reinforcing UNDIP's commitment to advancing equitable healthcare systems nationwide.



(Source: undip.ac.id)

UNDIP Ranked 6th Nationally in the 2025 Leiden Ranking



UNDIP PERINGKAT 6 NASIONAL
CWTS LEIDEN RANKING OPEN EDITION
2025

Universitas Diponegoro (UNDIP) achieved a significant milestone by securing 6th place nationally among Indonesian universities in the CWTS Leiden Ranking Open Edition 2025. This accomplishment reinforces UNDIP's standing as a research-oriented university with strong global academic impact and highlights its consistent performance in scientific publications and international research competitiveness.

The CWTS Leiden Ranking is an internationally recognized ranking system that evaluates universities exclusively based on bibliometric data from scientific publications. Unlike rankings that rely on reputation surveys or self-reported institutional data, the Leiden Ranking uses independently collected and verifiable publication data, ensuring objectivity, transparency, and methodological rigor in assessing research performance.

UNDIP Rector Prof. Dr. Suharnomo, S.E., M.Si., welcomed the achievement as validation of the university's research direction. "UNDIP's position in the Leiden Ranking shows that our research development is carried out with integrity, relevance, and real benefits for society," he stated. He reaffirmed the university's commitment to strengthening academic culture, encouraging research downstreaming, and delivering impactful scientific contributions that support sustainable development and community welfare.

Vice Rector IV for Research, Innovation, Cooperation, and Public Communication, Wijayanto, Ph.D., emphasized that the ranking reflects sustained efforts in strengthening research governance and global collaboration. "The CWTS Leiden Ranking, which is based on objective and transparent scientific publication data, demonstrates the collective contribution of UNDIP's academic community in producing research that excels not only in quantity but also in quality, impact, and global relevance," he explained. With data drawn from OpenAlex covering more than 2,800 universities worldwide, this achievement further strengthens UNDIP's reputation as a globally engaged research university committed to academic excellence and transparency.

(Source: undip.ac.id)

Universitas Diponegoro (UNDIP), through its Institute for Research and Community Service (LPPM), officially handed over ozone plasma equipment and solar dryers to the Temanggung Regency Government at Campurejo Village Hall, Tretep Subdistrict. The initiative forms part of UNDIP's Tri Dharma community service mission, aimed at strengthening food security, improving the quality of agricultural products, and enhancing the welfare of rural communities in Temanggung. The program demonstrates UNDIP's commitment to ensuring that research innovations provide direct benefits to society.

Representing the Rector, Head of LPPM Prof. Dr. Ing. Suherman, S.T., M.T., emphasized the university's dedication to applied research. "Through LPPM, UNDIP continues to develop research outputs that can be directly applied by the community. This activity is a tangible manifestation of the Poverty Alleviation and Food Security Program initiated by the Rector of Universitas Diponegoro," he stated. Vice Head for Research Prof. Firmansyah, S.E., M.Si., Ph.D., further explained that the ozone plasma technology developed by Prof. Dr. Muhammad Nur, DEA, can significantly extend the shelf life of agricultural products. "With ozone plasma and cold storage, the shelf life of products can reach up to two to three months. This allows farmers to better manage sales timing, stabilize prices, and reduce post-harvest losses," he noted.

Temanggung Regent Agus Setyawan welcomed the initiative and highlighted its relevance to local agricultural conditions.

Increasing Product Market Value and Supporting Food Security, UNDIP Hands Over Ozone Plasma and Solar Dryer Equipment to the Temanggung Regency Government



"This assistance is highly relevant to our local conditions and supports village-based economic development," he said. Through this collaboration, UNDIP reaffirms its commitment to poverty alleviation and food security by leveraging innovative technology to increase productivity and added value for small-scale farmers without expanding land use.



(Source: undip.ac.id)

Universitas Diponegoro's Innovation Team Provides Ultrafiltration Machine to Support Clean Water Needs for the Padang Community

Universitas Diponegoro (UNDIP) has reaffirmed its humanitarian commitment by deploying technological innovation to address the clean water crisis following floods and landslides in Padang City, West Sumatra. As part of its disaster mitigation efforts, UNDIP operated an ultrafiltration machine designed to provide potable water for communities affected by damage to conventional water distribution infrastructure.

The ultrafiltration unit has a high production capacity, capable of generating between 72,000 and 120,000 liters of clean water per day. With this output, the machine can meet the basic sanitation and consumption needs of approximately 1,200 to 2,000 residents. This technology has become a critical solution amid prolonged disruptions to clean water access caused by the disaster.

To ensure sustainable operation in the field, UNDIP established strategic collaboration with Politeknik Negeri Padang. This partnership focuses on technical maintenance of the equipment and expanding water distribution coverage to remote and logistically challenging areas, ensuring the continuity and effectiveness of the humanitarian response.



Clean water distribution is carried out daily through coordinated efforts with the Indonesian Red Cross (PMI) and the Padang City Regional Water Company (PDAM). Water is transported using tanker trucks with capacities of 5,000–6,000 liters to serve evacuation posts and residential areas. On-site observations show residents queuing in an orderly manner with containers such as buckets, jerry cans, and water tanks, assisted by field officers to ensure equitable and efficient distribution.

UNDIP emphasized that the initiative reflects its dedication to science-based humanitarian solutions. "Through the application of appropriate technology, UNDIP hopes to ease the community's burden and accelerate the socio-economic recovery of West Sumatra," the university stated. This effort underscores UNDIP's ongoing role in delivering tangible, technology-driven contributions to disaster-affected communities.



(Source: undip.ac.id)



Strengthening Its Reputation in Southeast Asia, UNDIP Welcomes Academic Visit from Mindanao State University to Initiate International Cooperation

Universitas Diponegoro (UNDIP) continues to strengthen its international reputation, as reflected in a benchmarking and academic visit by Mindanao State University (MSU), Philippines, held on January 20–21, 2026, at UNDIP's Tembalang Campus, Semarang. The visit aimed to explore opportunities for sustainable international collaboration in education, research, and community service, particularly within the Southeast Asian region.

The MSU delegation was led by MSU System President Atty. Paisalin P. D. Tago, CPA, and included senior university leaders such as the Vice President for Academic Affairs and the Vice Chancellor for Research and Extension. The agenda began with a courtesy meeting and an institutional introduction session, during which both universities presented their academic profiles, research strengths, and internationalization strategies, followed by a joint discussion on potential areas of cooperation.

UNDIP's Vice Rector for Research, Innovation, Cooperation, and Public Communication, Wijayanto, S.IP., M.Si., Ph.D., welcomed the delegation and emphasized the significance of the visit. He stated that the meeting marked an important momentum in reinforcing UNDIP's position as a globally oriented university committed to expanding meaningful international partnerships. The discussions were attended by UNDIP leaders, deans, vice deans, international affairs coordinators, and representatives from several faculties.

Meanwhile, MSU's Vice President for Academic Affairs, Dr. Minerva-Saminah M. Naga, expressed her appreciation for UNDIP's openness. "This is our first international benchmarking visit. We hope to gain insights into international academic and research practices," she said. The second day of the visit continued with faculty-level discussions to identify concrete collaboration opportunities, reaffirming UNDIP's commitment to advancing education, research excellence, and global engagement through strategic international cooperation.



(Source: undip.ac.id)

The Fifth UNDIP Volunteer Team Provides Psychosocial Support for Aceh Flood Survivors Through Series of Activities

The UNDIP Diponegoro Disaster Assistance Response Team (D-DART) Batch V carried out post-flood recovery assistance in Sekumur Kampoong, Sekerak District, Aceh Tamiang, from January 19 to 24, 2026. The volunteer deployment focused on psychosocial and spiritual recovery for disaster survivors, particularly children and adults affected by the floods.

During the mission, the D-DART team organized a series of child-centered psychosocial activities involving approximately 60 children. These activities included storytelling, singing, interactive games, and coloring therapy, aimed at restoring a sense of safety and joy. A mobile mini library was also provided to support children's learning and literacy needs during the recovery period.

In addition to psychosocial support, the volunteers distributed humanitarian aid to local residents. The assistance included snacks, books and religious learning materials, clothing for children and adults, as well as supplies for children and pregnant women. The team also continued recovery-oriented programs related to clean water provision and disaster nutrition services to support community health.

Despite facing challenges such as limited access routes and unfavorable weather conditions during the journey, the volunteers were able to carry out their activities smoothly with improved weather upon arrival. The local community expressed appreciation for the presence of the UNDIP D-DART team, particularly for the spiritual support provided through Qur'an recitation, religious sermons, touch therapy, and relaxation sessions.

A representative of the UNDIP D-DART team stated, "Our focus is not only on physical recovery, but also on restoring emotional strength and hope among disaster survivors. We coordinate closely with local authorities and previous teams to ensure that our assistance truly meets community needs." The team emphasized that the recovery programs initiated by Batch V will be continued by subsequent D-DART volunteers, reflecting UNDIP's sustained commitment to long-term humanitarian support.



(Source: undip.ac.id)



Universitas Diponegoro Participates in the Knowledge Co-Creation Program for Industry–Academia Collaboration in Japan



The Director of Innovation, Downstreaming, and Cooperation of Universitas Diponegoro (UNDIP), drh. Dian Wahyu Harjanti, Ph.D., participated in the Knowledge Co-Creation Program titled “University Management in Industry–Academia Collaboration” in Japan. The program brought together 12 representatives from Indonesian higher education institutions to strengthen leadership capacity and strategic approaches in fostering sustainable collaboration among universities, industry, and government. Through a co-creation learning model, participants explored Japanese best practices in innovation ecosystems, research downstreaming, and institutional collaboration frameworks.

During the program, participants engaged in discussions with relevant Japanese ministries to understand policy frameworks supporting university–industry partnerships. They also observed direct implementation of collaboration in the semiconductor industry in Kyushu and at YASKAWA Electric Corporation, and conducted academic exchanges with leading institutions such as Kumamoto University, Kyushu Institute of Technology, and Tohoku University (NanoTerasu). These activities provided practical insights into integrating research, startup development, industry needs, and government support through science technoparks as regional innovation hubs.

At the conclusion of the program, drh. Dian Wahyu Harjanti, Ph.D., presented an action plan before JICA leadership and related ministries and received a certificate of recognition. She reaffirmed UNDIP’s vision, stating, “Universitas Diponegoro is committed to driving the transformation from a research-based university into an impact-oriented university through innovation, technology downstreaming, and strategic partnerships with industry and government.” Her participation further strengthens UNDIP’s commitment to advancing collaborative, innovation-driven higher education at the global level.



(Source: undip.ac.id)

UNDIP Holds Early Meeting for ASIIN International Accreditation Visit, Preparing the Bachelor’s Program in Public Health for Global Quality



Universitas Diponegoro (UNDIP) reaffirmed its commitment to becoming a World-Class University (WCU) by holding the Entry Meeting for the ASIIN International Accreditation Visit for its Bachelor’s Program in Public Health on January 28, 2026, at the Widya Puraya Building, Tembalang Campus. The meeting marked a crucial stage in the international accreditation process conducted by ASIIN, bringing together university leaders, program managers, and international assessors. Welcoming the delegation, Rector Prof. Dr. Suharnomo, S.E., M.Si., stated, “UNDIP upholds good governance and digital transformation, supported by Centers of Excellence that drive innovation downstreaming for societal benefit.”

Vice Rector for Academic and Student Affairs Prof. Dr.rer.nat. Heru Susanto, S.T., M.M., M.T., highlighted the consistently high demand for the Bachelor’s Program in Public Health at the Faculty of Public Health (FKM). Dean of FKM Prof. Dr. Budiyo, S.KM., M.Kes., added, “UNDIP supports the government’s agenda to increase public health specialists with competencies in nutrition, hygiene, and sanitation. FKM UNDIP has also built international research collaborations, including a joint research program with National Taiwan University since 2024.” The program is recognized for its outcome-based curriculum, integration of promotive and preventive sciences, and strong emphasis on research and community engagement to ensure globally competitive graduates.

UNDIP also underscored its commitment to internationalization through various student mobility schemes. Director of Reputation, Partnership, and Global Connectivity Prof. Dr. Ir. Hadiyanto, S.T., M.Sc., IPU, stated, “UNDIP provides various scholarship schemes to support inbound and outbound mobility, including the Diponegoro Global Scholarship, Diponegoro Exchange Experience Program, KNB, and Darmasiswa.” The ASIIN visit reflects UNDIP’s continuous efforts to align academic quality and governance systems with international standards while strengthening its global engagement.



(Source: undip.ac.id)

FKM UNDIP Partners with Tegal City Government to Strengthen Food Security and Prevent Stunting

The Doctoral Program in Public Health (DKM) of the Faculty of Public Health, Universitas Diponegoro (UNDIP), conducted a community service initiative titled “DKM Mengabdi, Tegal Ceria” on January 15, 2025, in Slerok Subdistrict, East Tegal, to address stunting as a pressing public health issue. The program aimed to strengthen community food security through the promotion of affordable and nutritious local food sources, particularly fish-based protein, while reflecting UNDIP’s commitment to being a noble and beneficial university for society. Activities included education on balanced nutrition, food diversification, and healthy food processing to support optimal child growth.

The program adopted an educational and participatory approach and was attended by the Vice Mayor of Tegal City, Hj. Tazkiyatul Muthmainnah, S.K.M., M.Kes., along with local government and health representatives. In her remarks, she emphasized, “Efforts to prevent stunting must involve all sectors and prioritize vulnerable groups, especially families with toddlers.” UNDIP’s commitment was further underscored by Yudhy Dharmawan, S.K.M., M.Kes., M.Sc., Ph.D., Secretary of the DKM Program, who stated,



“We want universities to move beyond being ivory towers. Through this program, students are expected to make sustainable contributions to improving community welfare and food security, particularly in Tegal City.”

The initiative also featured practical training on accurate anthropometric measurements, interpretation of growth charts in the Maternal and Child Health (KIA) book, and education on the “My Plate” concept highlighting the importance of animal protein intake. The program concluded with a fish-based food creation competition involving mothers of toddlers and their families, fostering hands-on learning and community engagement. Overall, the event strengthened family capacity to monitor child development and prepare nutritious, affordable meals, reinforcing collective efforts to prevent stunting in Tegal City.



(Source: undip.ac.id)



The Faculty of Social and Political Sciences (FISIP) at Universitas Diponegoro (UNDIP), in collaboration with the FISIP Student Executive Board (BEM FISIP), officially launched the FISIP UNDIP Waste Management Volunteer Program as a strategic effort to promote a clean, healthy, and sustainable campus environment. The program was inaugurated by Dean Dr. Drs. Teguh Yuwono, M.Pol.Admin., and attended by the Head of UNDIP’s Occupational Safety, Health, and Environment Unit (UPT K3L), Dr. Bina Kurniawan, S.K.M., M.Kes. The initiative positions students at the forefront of driving behavioral change in waste management practices within the faculty.

In his remarks, Dean Teguh Yuwono emphasized that waste management is not merely a technical matter but a reflection of academic culture and awareness. “The launch of the Waste Management Volunteers represents our shared commitment to protecting the environment. Waste issues are not only about disposal, but also about changing habits and mindsets. Students play a strategic role as agents of change, starting from their immediate surroundings,” he stated.

Caring for the Campus Environment, FISIP–BEM Collaborate to Establish Waste Management Volunteers

Dr. Bina Kurniawan also expressed appreciation, noting, “FISIP UNDIP is the first faculty to establish a waste management volunteer program at the faculty level. We hope this positive initiative will inspire other faculties.”

The launch event was complemented by group exercise activities and services from the Integrated Non-Communicable Disease Post (Posbindu PTM), highlighting the integration of environmental sustainability and health awareness. Agne Yasa, S.I.Kom., M.A., Head of the Healthy Campus Unit of FISIP UNDIP, explained, “Through routine exercise and health screenings, we aim to build a campus culture that is both environmentally responsible and health-conscious.” Through this program, FISIP UNDIP reaffirms its commitment to fostering student-led sustainability initiatives as a foundation for a cleaner, healthier, and more responsible academic environment.

(Source: undip.ac.id)



Bedono Becomes a Coastal Living Lab: The Story of Mak Jah and the Role of FSM UNDIP in Social–Ecological Resilience



Bedono Village in Sayung Subdistrict, Demak Regency, has become one of the regions most severely affected by tidal flooding and coastal abrasion along the northern coast of Java. Over the past two decades, repeated tidal inundation has forced the relocation of at least 268 households, leaving only a few families as the shoreline continues to retreat. Today, Bedono stands as a stark example of rapid environmental change in the Pantura corridor and the growing vulnerability of coastal communities.

Amid these challenging conditions, Pasijah—widely known as Mak Jah—remains in Tambaksari Hamlet with her husband and child as the last family living in the area.

Facing daily tidal surges, she has planted mangroves around her home to serve as a natural barrier against waves and erosion. Mangroves not only protect the shoreline but also provide habitats for birds, fish, and blue swimming crabs. Her persistence has made Mak Jah a symbol of resilience in the face of climate-related threats.



Since 2022, the Faculty of Science and Mathematics (FSM) of Universitas Diponegoro (UNDIP), through the Cluster for Paleolimnology (CPalim), has developed Bedono as a living laboratory applying Nature-Based Solutions (Nbs). The initiative fosters collaboration among academics, communities, and government institutions to strengthen coastal social–ecological resilience. Professor Prof. Dr. Tri Retnaningsih Soeprbowati, M.App.Sc., Founder of CPalim FSM UNDIP, emphasized, “Mak Jah’s resilience in caring for mangroves shows that conservation and environmental change mitigation must be carried out together with local communities and involve multiple stakeholders.” FSM UNDIP hopes this living lab will inspire similar cross-sector initiatives to support sustainable development along the northern coast of Java.

(Source: undip.ac.id)



UNDIP Researchers Develop Eco-Friendly Fish Houses to Restore Marine Habitats

Universitas Diponegoro (UNDIP) continues to advance coastal environmental conservation through research-driven innovation. Prof. Dr. Ir. Munasik, M.Sc., developed BHUMI (Bangunan Hunian Rumah Ikan), an eco-friendly modular concrete artificial fish habitat designed to support the recovery of degraded marine ecosystems, particularly in areas such as the Java Sea. Developed in collaboration with PT Bhumi Jati Power under a corporate social responsibility (CSR) program, BHUMI also utilizes FABA-based industrial waste in line with circular economy principles, demonstrating how scientific research can transform industrial by-products into sustainable ecological solutions.

Field trials conducted in Teluk Awur and Karang Bokor, Jepara, showed promising results within two months of installation. At Karang Bokor, eight BHUMI units were colonized by hundreds of fish, with increasing biodiversity and the presence of demersal species such as snappers and groupers, indicating improving habitat stability. Meanwhile, Teluk Awur recorded lower diversity but was dominated by juvenile fish, highlighting BHUMI’s function as a nursery ground. The structures have also attracted other marine organisms, including sea urchins, sea cucumbers, crabs, and nudibranchs, suggesting the formation of stable microhabitats.

Prof. Munasik emphasized that the innovation complements, rather than replaces, natural ecosystems. “BHUMI is designed as an ecological bridge. It provides temporary living space for fish and marine biota while natural recovery processes take place,” he explained. He further noted, “Water quality, clarity, and human activity strongly influence colonization speed and stability; therefore, a science-based approach is essential.” Through long-term monitoring and responsible management, UNDIP reaffirms its commitment to delivering sustainable, research-based solutions for the restoration of Indonesia’s marine environments.



(Source: undip.ac.id)



UNDIP 2025 Performance Achievement Awards: Recognizing the Contributions of Faculties and Schools Toward a World-Reputable Campus

Universitas Diponegoro (UNDIP) held the UNDIP Performance Achievement Awards 2025 on Tuesday evening, January 27, 2026, at the Muladi Dome Multipurpose Building, Tembalang Campus. The event served as an institutional appreciation for the dedication, innovation, and collective performance of faculties, schools, and academic units throughout 2025, while also becoming a moment of reflection to strengthen a performance-oriented culture amid national efficiency and higher education transformation.

In his address, UNDIP Rector Prof. Dr. Suharnomo, S.E., M.Si. emphasized that the awards represent recognition of collective leadership demonstrated through concrete actions at all organizational levels. "This award is an appreciation of the collective work of faculties, schools, departments, and study programs at UNDIP. Amid disruption and efficiency challenges, leadership is not defined by position, but by action and the quality of decisions made at every level," he stated.

The Rector also highlighted UNDIP's significant achievement in the QS World University Rankings 2025, where the university climbed more than 100 positions to rank 624 globally. "Very few universities in the world can make such a leap in a single year. This is the result of shared commitment and hard work. Going forward, we are committed to maintaining the welfare of our academic community and continuously encouraging excellence so that UNDIP becomes increasingly dignified and beneficial," Prof. Suharnomo added.

Awards were presented across four strategic domains: Academic and Student Affairs; Planning, Finance, Assets, Business, and Facilities; Human Resources, Information Technology, Law, and Organization; as well as Research, Innovation, Cooperation, and Public Communication. These awards recognized faculties and schools for excellence in quality assurance, student achievements, governance, budget performance, human resource development, scientific publications, impactful partnerships, public communication, and World Class University (WCU) management.

At the culmination of the event, the Rector announced the Overall Winners of the UNDIP Performance Achievement Awards 2025. The Faculty of Engineering was named Overall Champion, followed by the Faculty of Law in second place and the Faculty of Science and Mathematics in third. The awards reaffirm UNDIP's collective commitment to quality, integrity, and competitiveness, while strengthening its trajectory toward becoming a world-class research university that is dignified and beneficial to society.



(Source: undip.ac.id)

UNDIP Strengthens Collaboration to Accelerate Its Path Toward the World's Top 500



Universitas Diponegoro (UNDIP) officially held the Signing of the 2026 Performance Agreement on January 9, 2026, at the Rector's Meeting Room, Widya Puraya Building, Tembalang Campus. The event was attended by Vice Rectors I–IV, Deans of Faculties and Schools, and heads of agencies and work units, marking a strategic commitment to strengthening governance and aligning institutional performance targets for 2026 in line with UNDIP's long-term development agenda.

In his address, Rector Prof. Dr. Suharnomo, S.E., M.Si, emphasized the importance of collaboration and shared responsibility in achieving institutional excellence. "We must work together in a healthy, collaborative, and joyful way. UNDIP aims to accelerate its progress and hopes to enter the world's top 500 universities," he stated. He added that exceeding targets would be highly appreciated, while unmet targets should become collective motivation for continuous improvement.

The Rector further underlined that all institutional policies and programs must remain student-oriented and responsive to social dynamics. "The policies and programs we develop are for students. We must be sensitive to their needs, including dynamics on social media. Good planning must be followed by consistent implementation so that UNDIP can contribute more significantly to education," he emphasized, highlighting the importance of consistency between strategy and execution.

Meanwhile, Head of UNDIP's Planning and Development Agency (BPP), Prof. Dr. Ir. Purwanto, DEA., explained that the 2026 Performance Agreement implements the UNDIP Strategic Plan 2025–2029, now entering its second year. "The performance indicators refer to the Strategic Plan's Key Performance Indicators, especially those related to World-Class University targets, such as publication output, Scopus indexing, and reputable Q1 and Q2 journals," he noted. The event concluded with the signing of agreements and the handover of Budget Implementation Documents, reaffirming UNDIP's collective commitment to transparent governance and sustained performance improvement toward becoming an Excellent Research University.



(Source: undip.ac.id)



UNDIP Creates a Safe Space for International Students through a Psychoeducation Campaign

Universitas Diponegoro (UNDIP) has officially been appointed as a Partner University in the Ministry of Health's Main Teaching Hospital Program (RSPPU). The appointment was marked by the signing of cooperation agreements on the provision of specialist and subspecialist doctors with RSUD Margono Soekarjo Purwokerto and RSUD Dr. Moewardi Surakarta. This collaboration strengthens UNDIP's strategic role in supporting national health development and represents a concrete implementation of the Asta Cita health agenda in line with the Ministry of Health's National Health Transformation under the six pillars of health system reform.

The agreement was signed by the Rector of Universitas Diponegoro and the Directors of both regional hospitals, witnessed directly by the Minister of Health of the Republic of Indonesia and key officials from the Central Java Provincial Government and the Ministry of Health. The partnership focuses on enhancing the role of RSPPU in ensuring the availability and equitable distribution of specialist and subspecialist doctors, particularly under the Health Human Resources Transformation pillar.

In his remarks, the Minister of Health expressed strong appreciation for UNDIP's contribution in translating health transformation policies into concrete regional action. "Health transformation cannot run without strengthening human resources. The RSPPU program is essential because it not only increases the number of specialist doctors, but also ensures equitable distribution and long-term sustainability of health services in the regions," the Minister stated.

Meanwhile, the Rector of Universitas Diponegoro affirmed that the collaboration also reinforces the Health Governance Transformation pillar through integrated and accountable cooperation among universities, hospitals, and regional governments. He emphasized UNDIP's commitment to maintaining high academic standards and quality clinical education aligned with national and regional health needs. Through this partnership, UNDIP contributes to advancing Asta Cita in the health sector and supporting the Sustainable Development Goals (SDGs), particularly SDG 3, SDG 4, and SDG 10.



(Source: undip.ac.id)