

**PROGRAM KERJA DAN PENGEMBANGAN
FMIPA SEBAGAI IMPLEMENTASI
RENSTRA FMIPA DAN ITB**



**FAKULTAS MATEMATIKA DAN ILMU
PENGETAHUAN ALAM
INSTITUT TEKNOLOGI BANDUNG**

**LANDASAN PROGRAM KERJA DAN PENGEMBANGAN FMIPA
2011-2015**

RENSTRA FMIPA 2011-2015

Visi:

Fakultas terkemuka, pelopor pengembangan matematika dan sains serta memberikan kontribusi bagi kesejahteraan bangsa

MISI:

- menyelenggarakan pendidikan **terbaik** dalam matematika dan sains untuk menghasilkan lulusan **berkarakter dan berdaya saing global**,
- melaksanakan penelitian **berkualitas dan terdepan** dalam matematika dan sains,
- melaksanakan **pelayanan publik dan pemberdayaan masyarakat** melalui pemanfaatan kepakaran fakultas bagi **kesejahteraan masyarakat**.

Program ITB (Rektor):

- Publikasi
- Internasionalisasi: pertukaran mahasiswa, program kerjasama pendidikan, akreditasi

Darma Pendidikan

- Double degree
- Student exchange
- Akreditasi internasional

Darma Penelitian

- Seminar/koneferensi/workshop
- Kerjasama
- Mendorong publikasi

COOPERATIONS (MoA):

➤ Australia:

- University of Newcastle

➤ Germany:

- RWTH Aachen
- The University of Koblenz-Landau
- Julius-Maximilians-Universitaet Wuerzburg
- Hochschule: Ulm; Ruesseleheim Geisenheim
- University of Cologne (in progress for renewed)

➤ Japan:

- Osaka University
- JUNED (Japanese University Network for Global Nuclear Human Resources Developmen):
e.g.: Kyoto Univ, TIT, Kyushu Univ, Nagoya Univ., etc (16 Univ.)
- RIKEN
- Hiroshima University
- Kanazawa University
- Gunma University

➤ South Korea:

- KAIST (Korean Advanced Institute of Science and Technology)
- Kyungpook National University

➤ Spain:

- University of Lleida

➤ Thailand:

- Nakhon Pathom Rajabhat University

➤ The Netherland:

- The University of Groningen
- University of Twente

Akreditasi internasional:

- International Accreditation (undergraduate programs):
 - RSC (Royal Society of Chemistry, London): Chemistry (2012) -accredited
 - ASIIN – Germany (visit 10-11 February 2015): Astronomy, Physics, Mathematics

Double degree programs

- Double degree programs (graduate level):
 - University of Kanazawa, Japan (Number of alumni/students: 45)
 - University of Twente, Netherlands (Number of alumni/students: 15)
 - French Universities (starting 2012) (Number of alumni/students: 29)
 - Osaka University, Japan (starting 2014)
 - University of Newcastle, Australia
 - University of Lleida, Spain
- Double degree with French Universities:

<ul style="list-style-type: none"> - Université d'Aix-Marseille, - Institut de Physique du Globe de Paris, - Université Pierre et Marie Curie, - Université Paris Sud/Paris XI, - Université Paris-est, - Université Nice Sophia Antipolis - Université d'Angers - Univ. Joseph Fourier-Grenoble 	<ul style="list-style-type: none"> - University of Littoral Cote d'Opale - Université de Rennes 1 - Université Montpellier 2 - Université de Lyon 1 - Université de Poitiers - Université Paris Diderot-Paris 7 - Université Paris 1 Panthéon Sorbonne
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International exposure of students:

- Short research visit: KAIST (since 2010)
- Campus Asia Program: Kanazawa (since 2010)
- Student Union short visit: NUS, UKM, UPM
- Mathematical Contest in Modeling (MCM).
- Joined The 55th London International Science Youth Forum (LIYSF).
- Second winner of The Green Brain, METU Northern Cyprus Campus.
- Joined Asia Pacific Youth Training on Media and Civic Participation and Global Media Forum
- Hong Kong Model United Nation Conference
- International Students Meeting (ISM) at NIT, ROURKELA, INDIA

Incoming Foreign Students:

Student Exchange:

- Japan (DD, Asia Campus)
- Germany (SE)
- USA (SE)
- Thailand (SE)
- Fiji (regular)
- The Netherland
- Turkey
- Spain
- Lithuania


Full time students:

- Fiji (S2)
- Papua New Guinea (PNG) (S2)
- Malaysia (S1)

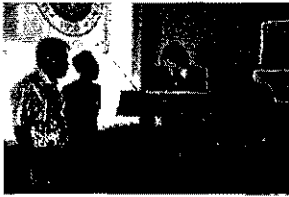
• Staff/student Exchange, sandwich program, joint research programs through Professor to Professor collaboration:

- Australia: Univ. of Curtin, CSIRO, Univ. of Newcastle.
- Freuch: Universite de Picardie, Institut Mines-Telecom,
- Germany: TU-Dortmund, Univ. of Hamburg, Univ. of Cologne, Univ. of Goettingen, Univ. of Stuttgart, Univ. of Kaiserslautern, TU-Munchen, Univ. of Koblenz, Univ. of Wuerzburg, etc.
- Japan: Univ. of Tokyo, Univ. of Kyoto, Univ. of Hiroshima, Univ. of Kanazawa, Univ. of Osaka, TIT, Univ. of Tohoku, Naruto University, etc.
- Korea: KAIST
- Lithuania: VMU
- New Zealand: Auckland Univ.
- Norway : NTNU Trondheim, Hogskole Gjovik
- Oman: Sultan Qaboos Univ
- Pakistan: GC University, Lahore
- Romania: University of RomaniaUK:
- Slovakia: STU Kosice, Commenius Univ.,
- Thailand: Mahidol University,
- The Netherland: Univ. of Twente, Univ. of Groningen
- USA: Southern Illinois,
- Erasmus-Mundus: <http://www.strougties.eu/index.asp?p=1711&a=1393>
- Etc.


GUESTS AT FMIPA



2011: Prof. R. Huber
(Nobel Laureate)



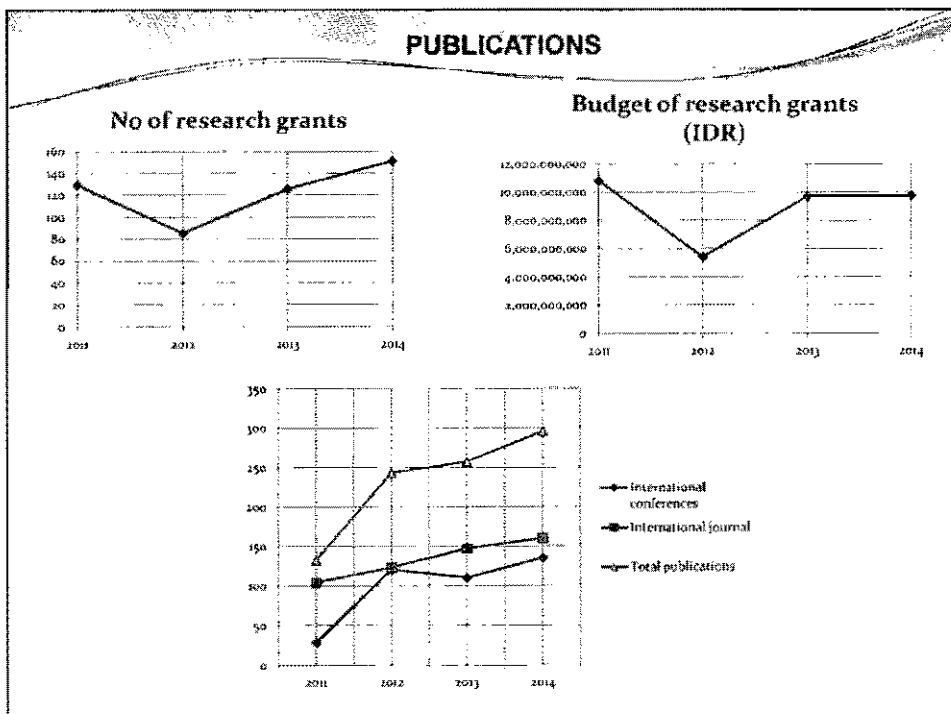
2011: Prof. C. Villani
(Field Medalist)



2014: Prof. Brian Schmidt
(Nobel Laureate)

Guest Scientists/institution:
 •More than 72 scientists visit FMIPA in 2014
 •Annual: 15 – 20 countries

Annual conferences at FMIPA (FMNS): ~ 15 conferences

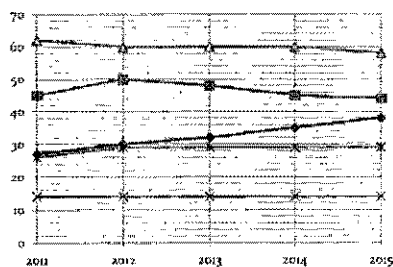


Collaboration with industries and government institutions

- PT. AXA Indonesia
- PT. AVIVA Insurance
- Indonesia Life Insurance Association
- PT. Bank Mandiri Tbk.
- Persatuan Aktuaris Indonesia
- Total Indonesia
- FMIPA - Universities in Indonesia
- District Kuantan Sengingi, Riau Province
- Gorontalo Province
- Central Sulawesi Province
- Nangro Aceh Darussalam Province
- West Java Province

Position	2011	2012	2013	2014	2015
Guru Besar/Professor	27	30	32	35	38
Lektor Kepala/Associate Professor	45	50	48	45	44
Lektor/Assistant Professor	62	60	60	60	58
Asisten Ahli/Instructor	14	14	14	14	14
Belum ada jabatan/Teaching Assistant	26	29	29	29	33
Total	174	183	183	183	187

Faculty Member of FMIPA



Penghargaan nasional:

- Habibie award
- Dosen, Kaprodi, karyawan berprestasi
- dll

Renstra 2015 - 2020

Education:

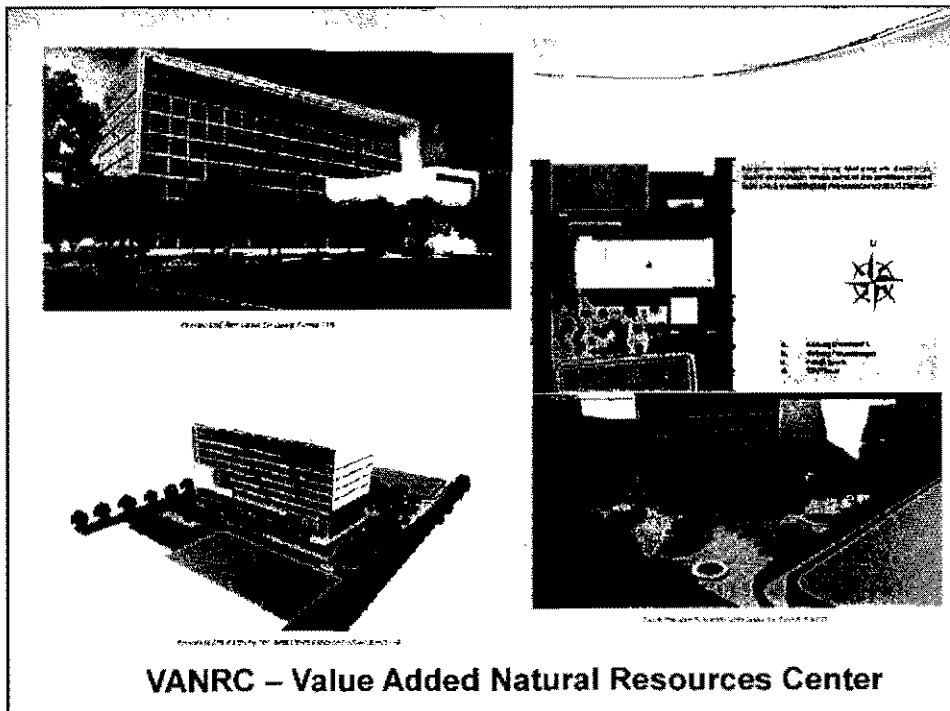
- Material courses: open course, blended learning, books
- Monitoring curriculum 2013 and international accreditation
- International programs
- Integrated educational programs (S1 – S2)

Research


- Research: integrated research topics
- Strengthen industrial linkages
- Increasing national contribution and international role

Community empowerment:


- Increasing for community services and empowerment
- Linkages: national institute or government bodies




PENGEMBANGAN LABORATORIUM FISIKA DASAR




GEDUNG FISIKA ITS



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