



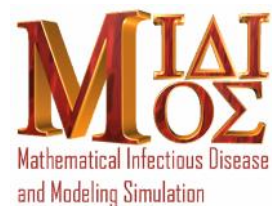
PPMS - ITB

**Center for Research on Mathematical Modeling and Simulation
Pusat Pemodelan Matematika dan Simulasi**

**PROMOTING MATHEMATICAL MODELING & SIMULATION
THROUGH MULTI-DISCIPLINARY SCIENCES**

Head : Dr. Nuning Nuraini
Secretary : Dr. Saladin Uttunggadewa
Personalia : Frischa Rachmania
: Dede

Researchers (active) :
Prof. Dr. Edy Soewono
Prof. Dr. Ir. Septorotno Siregar
Prof. Dr. Ir. Pudjo Sukarno
Dr. Kuntjoro A. Sidarto
Dr. Agus Yodi Gunawan
Dr. Rieske Hadianti
Dr. Darmadi
Oppinet Team, Finanmos Team, Midimos Team



Profile

- Head of Center for Mathematical Modelling and Simulation
- Research team based on project.
- Administration : 1 secretary and 1 OB





Vision

- To promote the roles of mathematics in modeling and simulation, ITB founded a center for research on the application of mathematics, named as P4M (Pusat Penelitian Pengembangan dan Penerapan Matematika) in 1994. Since 2007 the name of the center has become the center for Research on Mathematical Modeling and Simulation (P2MS).
- In the past few years, P2MS has consistently shown its direction towards an applied profile by carefully moving into a multi-disciplinary center. The task to create the linkages among scientists, engineers, and industry practitioners requires a solid group in which P2MS is currently, actively building this group involving local and international scientists.

Missions

- To be a center of science and research on mathematical modeling and simulation
- To enhanced academic atmosphere especially for graduate students and encourage the undergraduate student to continue their study for higher level
- To link its research to real industrial problems
- To create linkages among scientists, engineers, and industry practitioners
- To contribute into national development through graduate multi-disciplinary research activities
- To pursue international level in scientific achievement

Road Map

Year 0	Year 1	Year 2
<p>INITIATION PERIOD</p> <p>Initiation works have conducted to involve ITB, other universities and industrial counterparts nationally as well as internationally</p>	<p>IMPLEMENTATION PERIOD 1</p> <p>Aim: Strengthening capacity building; including human resources</p> <p>Action plan :</p> <ol style="list-style-type: none"> 1. Submitting proposals to International & National funding agencies 2. Collaborating with other universities & research institutes 3. Collaborating with industries 4. Hosting MSc, PhD students, and Post Doc 5. Hosting foreign experts 	<p>IMPLEMENTATION PERIOD 2</p> <p>Aim: Strengthening capacity building; including human resources</p> <p style="text-align: center;"></p> <p style="text-align: center;">MAIN OUTPUTS</p> <ol style="list-style-type: none"> 1. Capable human resources 2. Sufficient infrastructure: software with legal licence, good access to library 3. Good Networking 4. Scientific publications 5. Soft technology such as software
Year 3	Year 4	Year 5
<p>REFLECTION/RECONSTRUCTION PERIOD</p> <p>Evaluation on the previous works</p> <p>Improvement for the next steps</p> <p>Drafting & building the next strategies</p>	<p>ADVANCED IMPLEMENTATION PERIOD 1</p> <p>Aim: Toward integration of science, technology, and society</p> <p>Action plan :</p> <ol style="list-style-type: none"> 1. Hosting MSc, PhD students, and Post Doc 2. Extending visits of national and international experts and scientists 3. Extending collaborations with other universities and research institutes 4. More extensive collaborations with industries 	<p>ADVANCED IMPLEMENTATION PERIOD 2 & YIELDING PERIOD</p> <p>Aim: Toward integration of science, technology, and society</p> <p style="text-align: center;"></p> <p style="text-align: center;">MAIN OUTPUTS</p> <ol style="list-style-type: none"> 1. Scientific publications 2. Software 3. Recommendations to companies

Research Activities

- Research on optimizing gas and oil pipeline networks OPPINET (research consortium since 2000/2001- until now)
- Research on Financial Modelling (Various problem from AJB Bumiputera 1912, Garuda Indonesia, PT OSK Nusadana Asset Management, Pertamina Retail, Pertamina, etc).
- Research for modeling dengue transmission, prevention and control (since 2003 until now, cooperation with RS Hasan Sadikin Bandung, Indonesian Agency for Meteorology, Climatology and Geophysics, Essex University, UK, Radboud University Nijmegen, various research grant from Kemenristek Dikti since 2003 until now)

Community Services Activities

- Workshop for Mathematics Teacher (2016)
- Seminar and Focus Group Discussion for Junior High School Mathematics Teacher (2016)
- Workshop on Mathematical Modelling for Senior High School (2015)
- Organize Annual International for Biomathematics Symposium (Since 2013 until now)
- Organize various workshop on Financial Topic

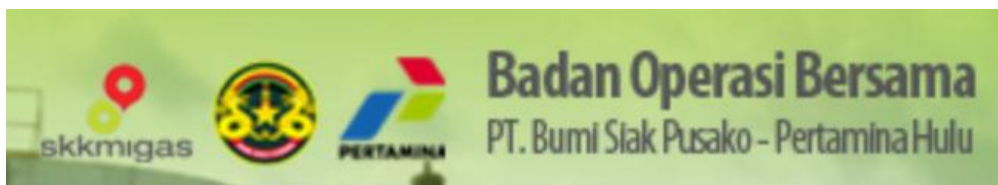
Past, Current and Up-coming Corporate Partners



Indonesian Agency for
Meteorology,
Climatology and
Geophysics
Government agency



Kementerian Energi & Sumber Daya Mineral
Direktorat Jenderal Minyak & Gas Bumi



OSK

PT OSK Nusadana
Asset Management



PPMS Performance Table (2015 -2017)

No	Program		2015		2016		2017	
1	Publikasi	Jurnal Internasional terindeks	judul	1 judul		judul		3
2		Jurnal Internasional	judul	judul		judul		
3		Jurnal ITB	judul	judul		1 judul		1
4		Jurnal Nasional terakreditasi di luar ITB	judul	judul		judul		
5		Jurnal nasional tidak terakreditasi	judul	judul		judul		
6		Prosiding Internasional	judul	2 judul		5 judul		4
7		Prosiding Nasional	judul	judul		judul		
8	Keterlibatan dalam penelitian**)	Jumlah KK		9		9		9
9		Jumlah F/S		3		3		3
10		Dosen Guru Besar	org	3 org		3 org		3
11		Dosen S3	org	16 org		15 org		15
12		Dosen S2	org	3 org		2 org		1
13		Mahasiswa S3	org	4 org		4 org		5
14		Mahasiswa S2	org	9 org		5 org		3
15	Mahasiswa S1	org	3 org		2 org		2	
16	Kerja sama *)	Mitra individu ITB di luar anggota PP/P	org	org		org		1
17		Mitra nasional	bh	8 bh		12 bh		5
18		Mitra internasional	bh	1 bh		1 bh		2
19	Dana penelitian dan kerjasama	ITB	Rp.	87,500,000	Rp.	132,500,000	Rp.	150,000,000
20		DIKTI (program/ skema)	Rp.	-	Rp.	-	Rp.	
21		Luar ITB nasional (sponsor/ program/ skema)	Rp.	623,880,000	Rp.	811,360,000	Rp.	4,447,106,000
22		Luar ITB internasional (sponsor/ program/ skema)	Rp.		Rp.		Rp.	
23		Total dana	Rp.	711,380,000	Rp.	943,860,000	Rp.	4,597,106,000

Diskusi

- Bagaimana cara mendirikan Pusat?
- Darimana anggaran Pusat?
- Bagaimana Pusat dapat bertahan?
- Apa beda Pusat dengan Prodi? Fakultas?
- ...? ? ?