Persoalan Sitasi [dan *Plagiarism*]
Dalam Karya Ilmiah

Perspektif Berinovasi di iARG – Jurusan Fisika FMIPA UNS

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Disajikan pada Lokakarya Senat UNS 30 Mei 20012

Plagiarisme [dalam keseharian] Kita

Karl Theodore zu Guttenberg – Ph.D. Bayreuth University

Image diambil dari Goresanpelangi

the most [shocking] case

Jan Hendrik Schon – Fisikawan Bell Laboratories
Author Misconduct: Tindakan Fabrikasi Data
Jumlah *retracted paper*: 6 dari Science, 7 dari Nature, dan 6 dari American Physical Society Journals;
Dipecat dari pekerjaan sebagai peneliti;
Sanksi tidak diijinkan mendapat dana riset selama 8 tahun;
Pencabutan gelar PhD oleh Universitas Konstanz pada tahun 2004.

Hwang Woo-Suk – Professor Bioteknologi Seoul National University Korea;
Author Misconduct: Tindakan Fabrikasi Data
Menjadi sangat terkenal berkat dua publikasi di Science pada 2004 dan 2005 yang menyebutkan keberhasilan pengembangan sel punca (stem cell) manusia dengan teknik cloning;
Kedua paper tersebut kemudian ditarik kembali;
Terkena sanksi hukum: penjara;
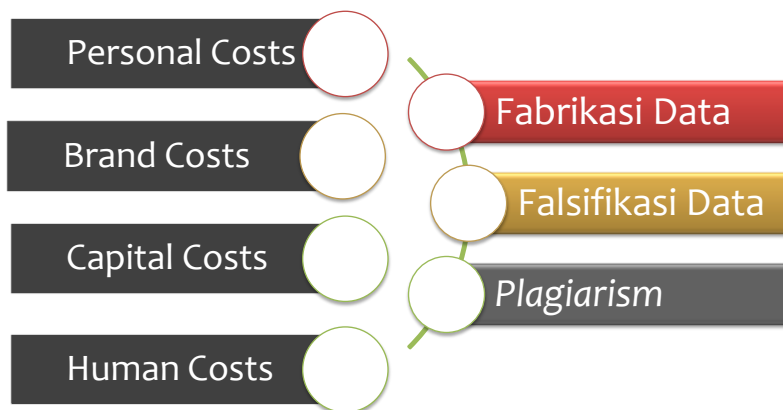Kehilangan pekerjaan: reputasi akademik hancur.

mengapa
[*author misconduct*]
terjadi?

outline [presentasi] saya

Author Misconduct: Ragam & Konsekuensinya
Sitasi & Authorships
Perspektif Strategi & Sistem Inovasi UNS

Author Misconduct and Its Costs
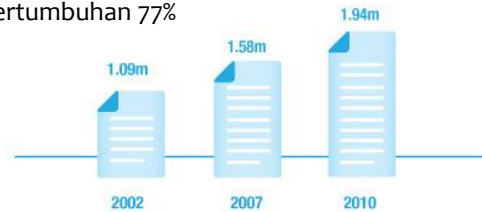
Personal Costs	
Brand Costs	
Capital Costs	
Human Costs	

Fabrikasi Data

Falsifikasi Data

Plagiarism

iThenticate®
Professional Plagiarism Prevention

[Data dari Laporan tahun 2012]

The Costs of Research Misconduct

Research is a growing global industry...

JOURNAL ARTICLES PUBLISHED ANNUALLY:

Pertumbuhan 77%

1.09m — 2002
1.58m — 2007
1.94m — 2010

VOLUME OF RESEARCHERS VS. PUBLISHING OUTLETS WORLDWIDE:

7 MILLION
RESEARCHERS[2]

31,758
SCHOLARLY JOURNALS[1]

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iThenticate®
Professional Plagiarism Prevention

[Data dari Laporan tahun 2012]

The Costs of Research Misconduct [2]

*Where cases of misconduct are increasing...*

23%
...OF SUBMISSIONS REJECTED BY A LEADING JOURNAL DUE TO PLAGIARISM[3]

RESEARCH MISCONDUCT DEFINED AS:[4]
- FABRICATION
- FALSIFICATION
- PLAGIARISM
- UNETHICAL TREATMENT OF RESEARCH SUBJECTS

1 OUT OF 3 SCIENTISTS ADMITS TO QUESTIONABLE RESEARCH PRACTICES[5,6]

iThenticate® — Professional Plagiarism Prevention

[Data dari Laporan tahun 2012]
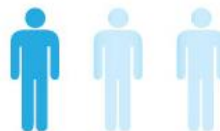
The Costs of Research Misconduct [3]

Leading to dramatic increases in retractions...

10+ FOLD INCREASE IN RETRACTIONS WORLDWIDE IN A DECADE[2]

2001: < 30 RETRACTIONS
2011: 400+ RETRACTIONS

TOP 4 REASONS FOR RETRACTIONS[2,9]

1. **MISTAKES**
2. **SELF-PLAGIARISM**
3. **PLAGIARISM**
4. **FABRICATION OR FALSIFICATION**

iThenticate® — Professional Plagiarism Prevention

The Costs of Research Misconduct [4]

With human and monetary costs...

TYPES OF DAMAGE FROM DECEPTIVE RESEARCH:

INDIVIDUAL COSTS — **JOB LOSSES, REVOKED PhDs AND AWARDS**

CAPITAL COSTS — **$525,000** COST OF A SINGLE INVESTIGATION INTO RESEARCH MALPRACTICE IN U.S. [7]

BRAND COSTS — **DAMAGED REPUTATIONS, RETRACTIONS AND SALES LOSSES**

HUMAN COSTS — **70,501** PATIENTS TREATED BY 851 RETRACTED SECONDARY STUDIES [9]

$110 MILLION
TOTAL COST OF INVESTIGATIONS INTO RESEARCH MISCONDUCT IN U.S. IN 2010[7]

mengapa
[*author misconduct*]
terjadi?

Quality [Measures] in Research

Conduct of Science:
Theory, Method, Analytical Model [Publishable]

Technology & Economic Outcome:
Prototype, Software, Tools [Patentable]

Societal Outcome:
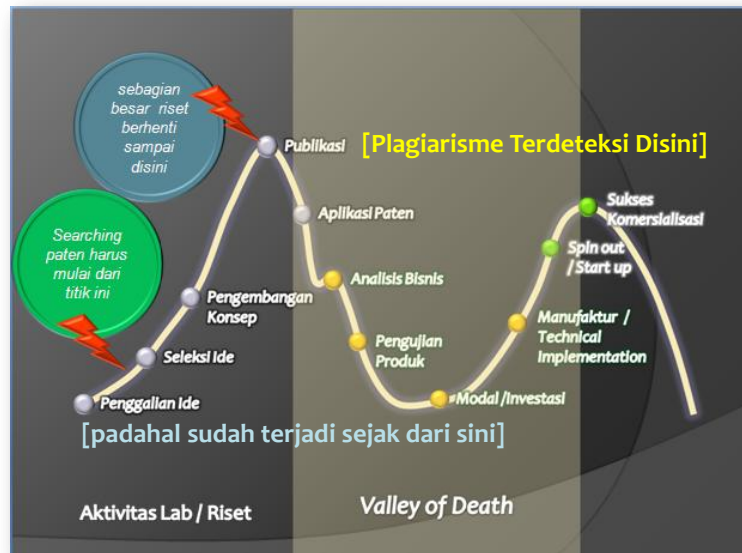Public Services, CSR Perspective

Educational Impact:
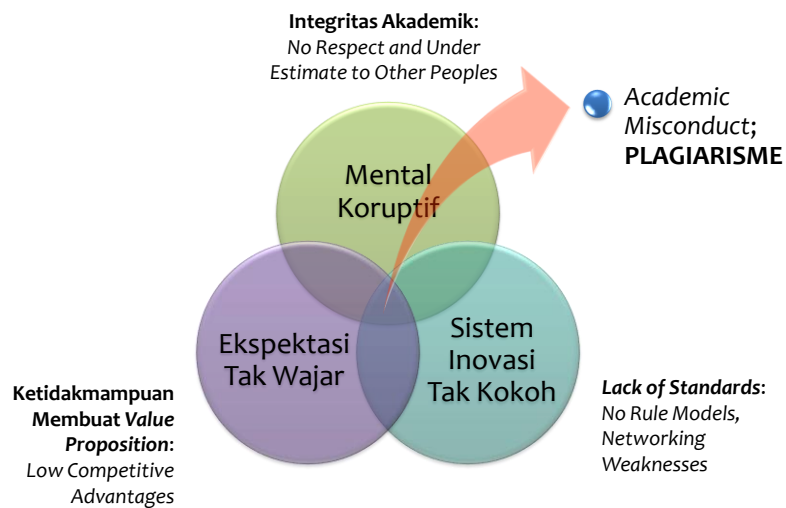Supporting for teaching and learning services

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Idiom Populer [yang wajib disikapi secara bijaksana]:
Publish or Perish

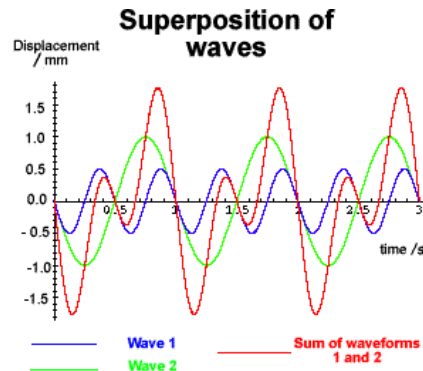Research Steps: Perspektif [**Entrepreneurial**] University

mengapa [plagiarisme] terjadi

mengapa [plagiarisme] terjadi

Superposisi Mental Koruptif dan Ekspektasi Tak Wajar dalam Keadaan Tak Mampu Membuat Value Proposition Menghasilkan Resultan dengan Kekuatan yang Dapat Merusak Integritas dan Ketahanan Sistem Nilai Akademik

Images:
http://www.cyberphysics.co.uk/graphics/graphs/superposition.gif
http://2.bp.blogspot.com/-KhWy9CZDWf8/TYQXUltxAqI/AAAAAAAAob4/UvUG79o9gwU/s1600/webeisme-tsunami.jpg

Masalah Sitasi & Authorships

Referencing:
1. *Citing in the text*
2. *Reference at the end of the works*

Citing & Referencing Styles:
Terdapat banyak ragam gaya sitasi dan penulisan referensi: Harvard System, APA, Chicago Style, dan lain-lain. Bahkan setiap jurnal internasional menyajikan tatacara sitasi yang berlaku [dapat diakses di internet].
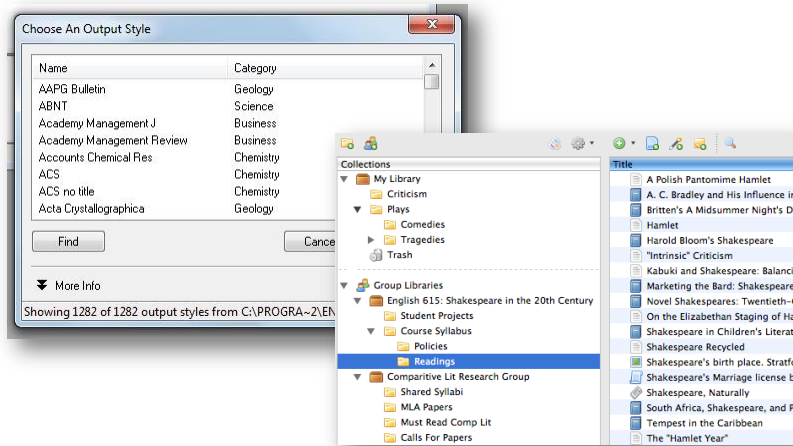
Perangkat Lunak:
Terdapat banyak pilihan perangkat lunak yang dapat memudahkan peneliti dalam mengelola referensi: Endnote, Refworks, Zotero.

Masalah Sitasi & Authorships

Referencing Styles & Resources Management:

Masalah Sitasi & Authorships [2]

Authorships:

Author is a person who has made a substantive intellectual contribution to the submitted manuscript. A substantive contribution includes of the following: Dezign or conceptualization of study OR analysis or interpretation of the data OR drafting or revising the manuscript for intellectual content.

Mahasiswa yang membantu proses penelitian [bertugas melakukan pengambilan data] tidak terkategorikan sebagai author. Peran mereka dapat diapresiasi di dalam acknowledgement. Pihak sponsor tidak terkategorikan sebagai author. Gift writer, grant writer dan apalagi ghost writer merupakan kategori author misconduct.

Masalah Sitasi & Authorships [3]

Re-Use of Data & Plagiarism Issue

Rule of Thumb
Seorang atau sekelompok peneliti telah terkategorikan melakukan self plagiarism tatkala yang bersangkutan menggunakan sebanyak 10% atau lebih data yang telah digunakan dalam publikasi terdahulu dengan tanpa penambahan atribut baru apa pun.

Sangat penting bagi para peneliti untuk memahami secara benar makna tersirat dari Cover Letter saat mengirimkan manuskrip kepada pihak penerbit.

Masalah Sitasi & Authorships [4]

Self Plagiarism

The issue is not related to publication of manuscript twice or more but about the **intention of the author(s) to deceive**.

Dalam banyak peristiwa semisal kasus Nelson Tansu, self plagiarism terjadi karena 'tekanan karir'. Idiom Publish or Perish harus disikapi dengan sikap dan perilaku bijaksana. Universitas berkewajiban mengembangkan strategi bersistem untuk menanggulangi segala macam academic misconduct.

some [research] finding

#1

Cheaters cheating themselves

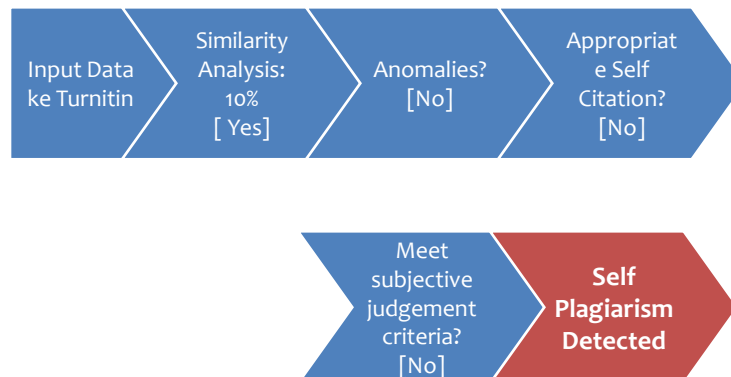Kavanaugh, J. F., *Cheaters*, America Vol 189, Sept. 29, 2003

#2

jika seseorang dapat melakukan tindakan plagiarisme dengan tanpa terdeteksi, maka sejatinya orang tersebut memiliki kemampuan untuk menulis karya ilmiah dengan tanpa perlu melakukan tindakan kecurangan

Malesic, J. *How dumb do they think we are?*
Chronicle of Higher Education, vol 53. Dec 15, 2006

Masalah Sitasi & Authorships [4]

Common Self Plagiarism Combating Strategy

Input Data ke Turnitin	Similarity Analysis: 10% [Yes]	Anomalies? [No]	Appropriate Self Citation? [No]

Meet subjective judgement criteria? [No]	**Self Plagiarism Detected**

strategy [for plagiarism] combating

| Integrated Innovation System | Suspected |

Systemic Approaching   TurnItIn,
Personal Approaching   Viper, etc.

Ke[tidak]patutan Tidak Dapat Secara Tepat Dinyatakan dengan Angka

## Aplikasi [Pendeteksi] Plagiarisme

Aplikasi [Pendeteksi] Plagiarisme

Aplikasi [Pendeteksi] Plagiarisme

Tabel 1. Ragam Layanan dan Aplikasi Pendeteksi Plagiarisme

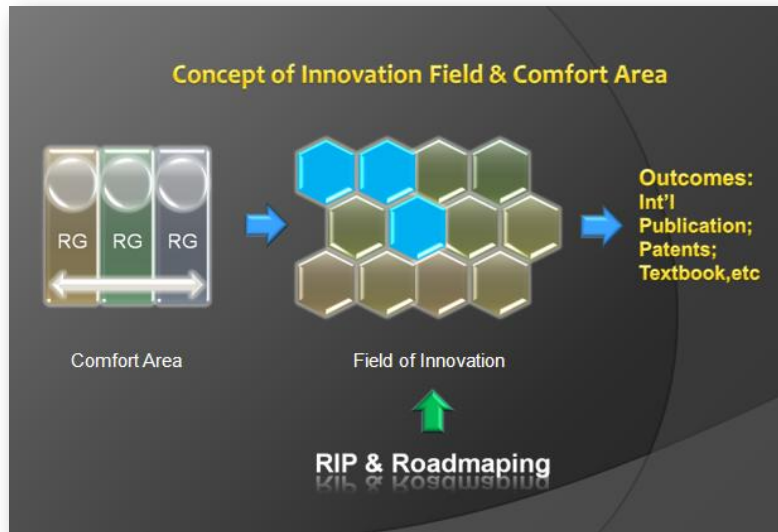| Nama	Website	Gratis	Berbayar
Plagiarism.org	www.plagiarism.org		✓
TurnItIn	https://turnitin.com/		✓
Ithenicate	http://www.ithenticate.com/		✓
WriteCheck	https://www.writecheck.com/		✓
TurnItInAdmission	https://www.turnitinadmissions.com/		✓
CopyScape	http://www.copyscape.com/	✓	✓
DOCCop	http://www.doccop.com/	✓	
CheckForPlagiarism	http://checkforplagiarism.net/		✓
Plagiarism.com	http://www.plagiarism.com/	✓	✓
PlagiarismFinder	http://www.plagiarismfinder.com/		✓
SaveAssign	http://www.safeassignment.com/		✓
Plagiarismdetect	http://www.plagiarismdetect.com/	✓	✓
Viper	http://www.scanmyessay.com/	✓	
DupliChecker	http://www.duplichecker.com/	✓	

Migrasi [Budaya] Berkarya
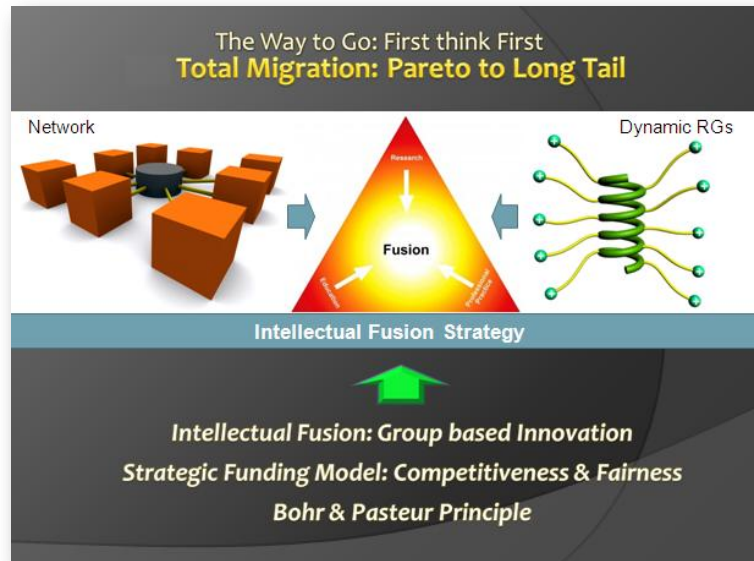
Migrasi [Budaya] Berkarya
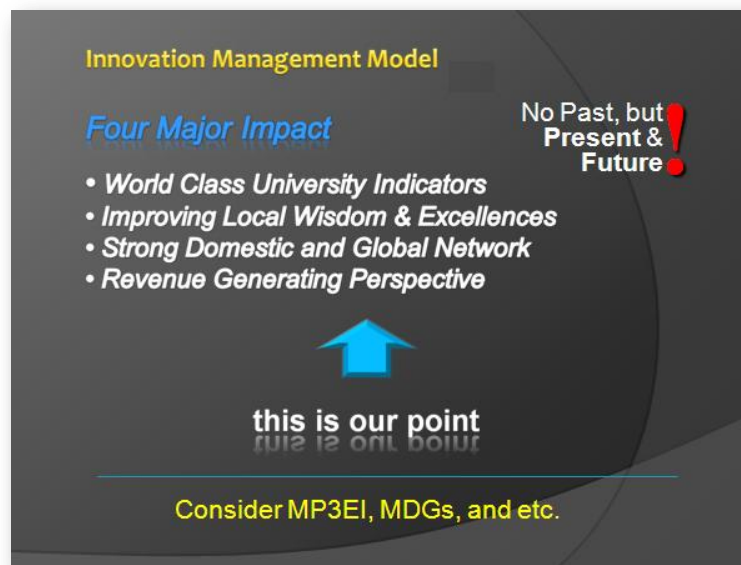
Grup Riset sebagai Comfort Area
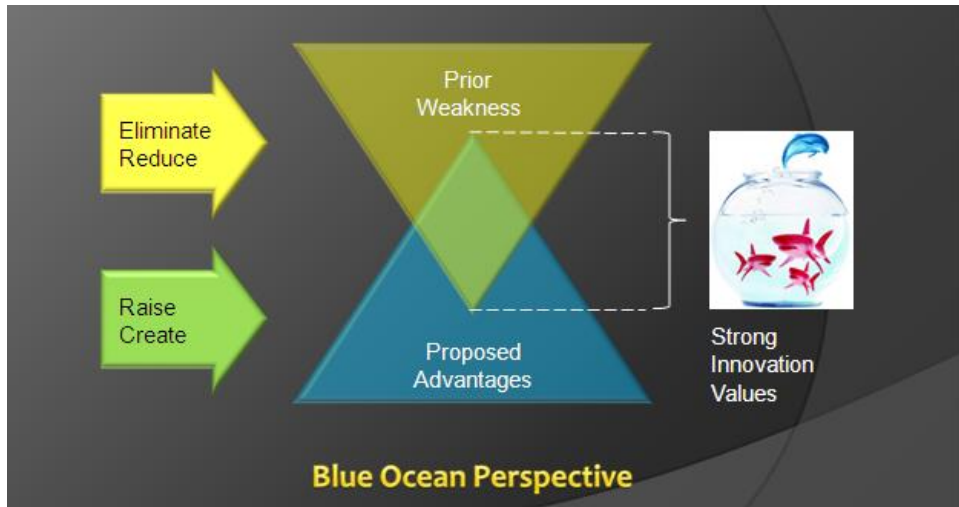

Grup Riset sebagai Comfort Area

Grup Riset sebagai Comfort Area

V Formation Inspiration:
Up to 70% Efficiency

Berada dalam Barisan Menyajikan
Lebih Banyak Keselamatan

#3.
Definisikan
Keunggulan
Kompetitif

16

Blue Ocean Strategy [Kim and Mauborgne]

Blue Ocean Strategy [Kim and Mauborgne]

Red Ocean Strategy	Blue Ocean Strategy
Compete in existing market spaces	Create uncontested market space
The industry structural condition are given and firms are forced to compete within them (*structuralist view/environmental determinism*)	Market boundaries and industries can be reconstructed by the actions and beliefs in industry players (*reconstructionist view*)
Beat the competition	Make the competition irrelevant
Exploit existing demand	Create and capture new demand
Make the value/cost trade off	Break the value/cost trade off
Align the whole system of a company's activities with its strategic choice of differentiation *or* low cost	Align the whole system of a company's activities in pursuit of differentiation *and* low cost

Thinker Toys [Michael Michalko]

iARG Expertise Marketing Model
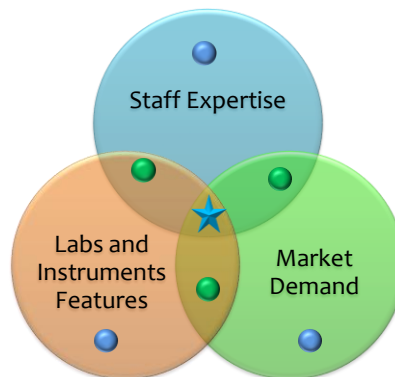
★ **Star Segment:** Top Priority [Main Product and or Services]

🟢 **Green Segment:** Short and medium term development [Promising product and or services]

🔵 **Blue Segment:** Implement the Blue Ocean and Thinker Toys Strategy for Long Term Development Product and or Services Improvement and diversification

Strong Innovation Track Record:
Research and Technology Development Achievement;
Collaboration and Networks [**Form RG01**]

Staff Expertise

Labs and Instruments Features

Market Demand

Specific Measurement & Analysis Capabilities:
Standards [SNI, ISO, ASTM, JIS, etc.]

Specific Market:
Define the main products and services; Develop product diversification .

iARG Expertise Marketing Model [3] : Example

Strong Innovation Track Record:
Long story on Acoustics Research: Sound Absorber development; sound and vibration based energy harvesting; room and environmental noise analysis; sound diffuser and exhaust muffler simulation and design

Staff Expertise

Labs and Instruments Features

Market Demand

Specific Measurement & Analysis Capabilities:
Sound absorption and sound transmission loss measurement [ASTM, ISO, and JIS]; room acoustic analysis [ASTM & ISO]; environmental noise analysis [ASTM & ISO]; Sound intensity analysis [ISO]; and transfer function based analysis [ASTM & ISO].

Specific Market:
Automotive Supply Industries [silencer, front hood, carpet, and etc.]; exhaust muffler industries; acoustics materials industries; auditorium and hall acoustics measurements; Acoustic tile and partition including sound diffusers, and etc.

Catatan Akhir

Plagiarisme [BUKAN] Pilihan

maturnuwun