

Indra Komara

Structural Engineer



Personal Info



Address

Work: Department of Civil Infrastructure Engineering
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Laboratory:

Laboratory of Building Materials and Structures



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WoS ID : GOJ-7554-2022



Linked-in

<https://www.linkedin.com/in/indra-komara-2225aa72/>

CURRICULUM VITAE

Structural Engineer with 10 years of experience in particular interest of durability assessment and building inspection. Adept at handling laboratory experiment with a numerical analysis, investigate the eligibility of building and structure as well as monitoring the structural quality. He also execute several structural design issues and managing the building investigation. He priorly interest into development of locally available materials to support the current problems of green building and green economy.

Experience

2009-08 **Field inspector**

2009-10 *PT. Pembangunan Perumahan, Building and infrastructure*

- Assist Engineering Department in setting up grades for road projects.
- Performs related duties as required.
- Assist supervises lead-workers on specific crews; handles complex problems difficult to deal with;

2011-08 **Junior Contractor**

2011-10 *PT. Bangun Persada, constr. management and general affair*

- May make final decisions in the absence of the Division Director.
- Assists in selection, evaluation and supervision of full time and seasonal employees.
- Coordinates workload of crews; prioritizes job assignments; generate records and reports of activities supervised

2011-11 **Junior Engineer**

2012-06 *PT. Surya Raya Rubberindo Industries (ASTRA Group), Building and support*

- Responsible for checking and testing of certain meters in an industrial plantation.
- Responsible in maintaining the optimum performance of a certain engineering system or design, as per direct mandate by the Engineer.
- Execute precise engineering proposal computations.
- Devise, organize and ensure engineering arrangements and revisions.

2012-12 **Structural Assistant**

2016-08 *Institut Teknologi Sepuluh Nopember, Civil Engineering*

- Performing engineering tasks related to design, inspection, construction, maintenance and repair of a certain work
- Maintaining records, reports and correspondence required within the engineering office and performing other related tasks as required or directed by superiors

Dr. Indra Komara**Structural Engineer**

Skills

Structural Evaluation and Investigation

Structural analysis



Evaluate the eligibility structure



Investigate the behavior Str.



Architectural investigation



Site visit structural aspect



Modelling and control structure



Engineering retrofitting



Field investigation capability

Core Drill



Ultrasonic Pulse Velocity



Rebar detector



Hammer Test



Corrosion test



Microstructure materials test



Experience

2017-12 **Research Assistant**

2022-08 *Institut Teknologi Sepuluh Nopember,*
Civil Engineering Department
Laboratory of Concrete and Building materials

- Assists with academic research.
- Assists with the editing and preparation of manuscripts.
- Meets regularly with supervisor to discuss research assignments.
- Performs research work in archives, through interviews, online, or whatever may be appropriate to assist the assistant's supervisor.
- Prepares literature reviews and Gathers and analyzes data.
- Prepares materials for submission to agencies and foundations that fund research.
- Assists in the acquisition of research materials from campus facilities.

2018 **Structural Engineer**2019 *ITS Kemitraan*

- Preparing reports, designs and drawings
- Making calculations about loads and stresses
- Selecting appropriate construction materials
- Providing technical advice
- Obtaining planning and/or building regulations approval
- Liaising with relevant professional staff such as architects
- Monitoring and inspecting work undertaken by contractors
- Administering contracts
- Managing projects
- Inspecting properties to check conditions/foundations

2018 **Structural Engineer**2020 *ITS Techno Sains*

- Prepare reports, designs, and drawings.
- Make calculations about pressures, loads, and stresses.
- Consider the strength of construction materials and select appropriately.
- Provide technical advice on safe designs and construction.
- Obtain planning and/or building regulations approval.
- Analyze configurations of the basic components of a structure.
- Liaise with professional staff such as architects and engineers.
- Monitor and inspect all work undertaken by contractors to ensure structural soundness.
- Administer contracts and manage projects.
- Inspect properties to evaluate the conditions and foundations.
- Use computer-aided design technology for simulation purposes.

Dr. Indra Komara**Structural Engineer****Skills****Intermediate Task
using Microsoft Office**

Microsoft Word



Microsoft Excel



Microsoft Power Point



Microsoft Access



Microsoft Publisher



Microsoft Visio



Microsoft Project

**Graphic and Design**

AutoCAD



Corel Draw



Adobe Lightroom

**Structural and FEM Software**

SAP2000



ETABS



ABAQUS



spColumn

**Educations**2008-09 **Politeknik Negeri Bandung (Diploma)**

- 2011-09
- Am.d in Building Engineering
 - GPA 3.21 (in the scale of 4.00)
 - Diploma Thesis : Study on Effect of Self-Compacting Concrete with Partial Replacement of cement Using Silica fume on High strength concrete

2012-09 **Institut Teknologi Sepuluh Nopember (Bachelor Degree)**

- 2014-09
- B.Eng. in civil engineering
 - GPA 3.62 (in the scale of 4.00) - Graduating With Honor
 - Bachelor Thesis : Effect of Angle of Inclination cables on the Performance of Submerged Floating Tunnel Under Hydrodynamic Load

2015-09 **Institut Teknologi Sepuluh Nopember (Master Degree)**

- 2017-09
- M.Eng. in Structural Engineering
 - Full scholar from Indonesia Endowment fund for Education, Ministry of Finance, Republic of Indonesia
 - GPA 3.88 (in the scale of 4.00) - Graduating With Honor
 - Thesis: Tensile Testing of Cold-formed Lightweight steel connections using screw and adhesive material

2017-01 **Anadolu University (Master Degree)**

- 2017-09
- A grantee of research mobility program from Erasmus Mundus
 - Joint Research collaboration ECTS credit 30 in total with Grade YT / AA (grade point 4.00 in scale of 4.00)

2015-09 **Institut Teknologi Sepuluh Nopember (Doctoral Degree)**

- 2021-09
- PhD in Structural Engineering
 - Full scholar from Indonesia Endowment fund for Education, Ministry of Finance, Republic of Indonesia
 - Research: A novel alternative to enhance durability performance of marine infrastructure using engineered cementitious composite

2021-01 **Institut Teknologi Sepuluh Nopember (Engineering Degree)**

- 2021-07
- Insinyur in Civil Engineering
 - Research: A novel structure using engineered cementitious composite under marine environment

2022-08 **Eskisehir Technical University (Research Visit)**

- Research collaboration scheme
- Development autonomous monitoring system for durability assessment and material investigation under micromechanics analysis

Dr. Indra Komara**Structural Engineer****Honors and Awards****August 2017**

Young Research Award,
Global Research and
development services,
Lisbon, Portugal

May 2018

Best Presenter in
Community and
Technological Ideas 2018,
ITS, Indonesia

October 2018

Guest Lecturer
Guilin University of
Electronic Technology in
Engineering department

December 2018

A recognition as the inter-
national delegation to Na-
tional Chengkung Universi-
ty, Tainan, Taiwan

December 2019

Invited International
organizing committee of
ICAST 2019 in Kumamoto
University, Japan

December 2019

Granted as Research Chair
of oral presentation of
ICAST 2019, Kumamoto
University, Japan

October 2020

International accepted
research exchange in
Kumamoto University
according to JASSO

Conferences

- 2015-11 The fifth Environmental Technology and Management Conference "Green technology towards sustainable environment"
- 2015-12 Konferensi Inovasi di Bidang Rekayasa Teknologi Serta Aplikasi Industri dan Management
- 2016-01 International conference on civil engineering research "Contribution of civil engineering toward building a sustainable city"
- 2016-08 The 2nd International Seminar on Science and Technology
- 2016-05 International Association for Bridge and Structural Engineering Conference, Guangzhou 2016 "Bridges and structures sustainability – seeking intelligent solutions"
- 2016-07 The international conference of communication science research "communication as part of social change and empowerment"
- 2016-08 Symposium 1 University network for Indonesia Infrastructure Development (UNIID)
- 2017-05 International Conference on Civil and Environmental Engineering (ICOCEE - Cappadocia)
- 2017-06 International Conference of Global Research and Development Services, University de Lisboa, Lisbon, Portugal
- 2017-06 International Conference Civil Engineering: Present Problems, Innovative solutions, University of Science and Technology (UTP), Bydgoszcz, Poland
- 2017-08 Regional Conference in Civil Engineering (RCCE) The Third International Conference on Civil Engineering Research (ICCER)
- 2018-09 International Conference on Sustainable civil engineering structures and construction materials "Sustainable structures for generations"
- 2019-07 Workshop for Global Engineers in Asia and Beyond
- 2019-11 The 14th International Student Conference on Advanced Science and Technology (ICAST) Kumamoto
- 2020-02 The International Research forum under a program of maritime and urban engineering, Osaka University
- 2020-05 Real-time warning system to predict Tsunami using Machine learning
- 2020-07 The 4th International Conference on Civil Engineering Research (ICCER) 2020
- 2020-10 The 2nd International Conference on Advanced Engineering & Technology 2020

Dr. Indra Komara**Structural Engineer****Courses & Certificates****2018/05 - 2020/05**

Workshop Pengembangan Keprofesian berkelanjutan (PKB) Bidang K3 Konstruksi (Workplace safety and health equipment training certificate)

**2018/05 - 2020/05**

Ahli Muda Manajemen Konstruksi (Construction management training certificate)

**2018/04 - 2020/04**

Perencanaan Tata Ruang wilayah dan Kota (Planning Spatial and city space raining certificate)

**2018/04 - 2020/04**

Ahli Pengawas Konstruksi Bangunan gedung (Building inspector certificate)

**2021/23 Sept.- 2024/22 Sept.**

Ahli Teknik Bangunan Gedung—MADYA

Publications

E. Susanti, H. Istiono, **I. Komara**. Effect of fly ash to water-cement ratio on the characterization of the concrete strength. IOP Conf. Series: Mat. Sci. Eng. 1010 (2021) 012035

D. Pertiwi, **I. Komara**. R. Fristian. Design concept of reinforced concrete beams with large web openings. IOP Conf. Series: Mat. Sci. Eng. 1010 (2021) 012039.

Nareswaranandinda, S. H. Laksono, A N Ramadhan, A Budianto, **I. Komara**. The design concept of bamboo in micro housing as a sustainable self-building material. IOP Conf. Series: Mat. Sci. Eng. 1010 (2021) 012026.

I. Komara, P. Suprobo, D. Iranata, A. Tambusay, W. Sutrisno. Experimental investigation on the durability performance of normal concrete and engineered cementitious composite. IOP Conf. Series: Mat. Sci. Eng. 930 (2020) 012056.

M. A. Bastian, A. Tambusay, **I. Komara**, P. Suprobo. Enhancing the ductility of a Reinforced concrete beam using Engineered cementitious composite. IOP Conf. Series: Eart. Env. Sci. 506 (2020) 012044.

I. Komara, A. Tambusay, W. Sutrisno, P. Suprobo. Engineered Cementitious Composite as an innovative durable material: A review. ARPN J. Eng. Appl. Sci. (2019) 14, 822–33

I. Komara, E. Wahyuni, P. Suprobo. T. Kivanc. Micro-structural Characterization of the bond strength capacity of adhesive material in the alternative of cold-formed steel frame system. IOP Conf. Series: Mat. Sci. Eng. 462 (2019) 012004.

I. Komara, E. Wahyuni, P. Suprobo, T. Kivanc. Assessing the Tensile Capacity of Cold-Formed Steel Connections using Self-Drilling Screws and Adhesive Materials. IJASEIT. 8, 2, 397-404 (2018)

I. Komara, E. Wahyuni, P. Suprobo, A study on Cold-formed Steel Frame Connection: A review, IPTEK The journal for technology and science, 28, 3, 83-89 (2017)

I. Komara, T. Kivanc, E. Wahyuni, P. Suprobo. Experiment on cold-formed steel c-section joint with screw and adhesive material, MATTER: IJST, 3, 2, 51-63 (2017)

I. Komara, T. Kivanc, E. Wahyuni, P. Suprobo. The experimental study of cold-formed steel truss connections capacity: Screw and adhesive material, Journal of current construction issue, 3, 2, 229-24 (2017)

I. Komara, T. Kivanc, E. Wahyuni, P. Suprobo. Adhesively Bonded Connection and Screw Connection of Single Truss Cold-Formed Steel Canals Frames Due to Tensile Test Behavior. ICOCEE Proceeding, 2, 29-38 (2017)

E. Wahyuni, **I. Komara**, Effect of Triangle Cable Configuration on the Behaviour of Reinforced Concrete Submerged Floating Tunnel under Hydrodynamic Load, IABSE Symposium Report, Guangzhou, China (2016)

Further information and relations:

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