

Yuyun Tajunnisa

Concrete Material and Structure

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Position **Lecturer (Assistant Professor)**

Head of Laboratory of Material and Structural Building
Department of Infrastructural Civil Engineering, Faculty of Vocations,
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Education

Post-doctoral and Joint Research, Research topic about: Green Cement Material and Acoustic Emission Non-Destructive Testing (NDT), Architectural and Civil Engineering Department, Faculty of Graduate School of Science and Technology, KUMAMOTO University, Japan, 2019-May 2020 under Hitachi Global Foundation.

Doctor of Engineering (Dr. Eng), Dissertation topic about: Concrete Material and Acoustic Emission (NDT), Architectural and Civil Engineering Department, Faculty of Graduate School of Science and Technology, KUMAMOTO University, Japan, 2014-2017.

Groundwater Environmental Leader Program of Kumamoto University (GelK), Topic: Groundwater, KUMAMOTO University, Japan, 2014-2017

Master Teknik (M.T), Master Degree of Civil Engineering, Thesis Topic about: Building Structure, Faculty of Civil and Planning (Teknik Sipil, Fakultas Teknik Sipil dan Perencanaan), Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia

Certificate III and IV, Certificate III and IV (practical and teaching works), HOLMESGLEN Institute of TAFE, Melbourne, Australia: **Certificate III in General Construction**, field in Solid Plastering; **Certificate III in General Construction**, field in Wall and Ceiling Lining; **Certificate III in General Construction** field in OH&S requirements; Erect and dismantle restricted height scaffold, Operate elevated work platforms; **Certificate IV in Training and Assessment**

Sarjana Teknik Sipil (S.T), Civil Engineering (undergraduate), Topic Thesis about: Bridge Construction, Fakultas Teknik Sipil dan Perencanaan, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia

Diploma III Teknik Sipil Konstruksi (Am.d), Topic Thesis about: Bridge Construction, Fakultas Teknik Sipil dan Perencanaan, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia

Internship

GelK International Advanced Joint Training at Minamata, Japan
 GelK Internship at Kumamoto Prefectural Office
 GelK Internship at Kumamoto City Hall
 Gifu Environmental Management Technology Center

Awards and Honors

1. 2018, Category of Resistance Building Awards in IDEERS Competition, Taipei, Taiwan in September 2018 as Supervisor of Students.
 2. 2018, The 1st winner on Bridge Competition in UGM Indonesia on 27 October 2018 as Supervisor of Students
 3. 2018, The 3rd winner on Bridge Competition in ITS Indonesia on 29 September 2018 as Supervisor of Students
 4. 2018, Excellent Graduate Student Award from Kumamoto University
 5. 2017, Gold award the best paper, International Conference Green Construction Technology and Engineering Education for Sustainable Future International Conference
 6. 2013, Indonesia Open and Integrated Online Learning Program (Program Pembelajaran Daring Indonesia Terbuka dan Terpadu = PDITT), MK MOOC, as a team PIC on Courses: Concrete Technology and Formwork
 7. 2013, Award Predicate the Best Ten of Improvement of Teaching and Learning Activities for Supporting Development of Instructional Materials as Student Center Learning (SCL) in Share ITS: Ilmu Ukur Tanah/ Mapping Course. Sponsorship: ITS Surabaya.
 8. 2013, Award Predicate the Best Ten of Improvement of Teaching and Learning Activities for Supporting Development of Instructional Materials as Student Center Learning (SCL) in Share ITS: Teknologi Beton dan Bekisting/ Concrete and Formwork Technology Course. Sponsorship: ITS Surabaya.
 9. 2013, Award the Best Ten of Improvement of Teaching and Learning Activities for Supporting Development of Instructional Materials as Student Center Learning (SCL) in Share ITS: Metode Numerik/ Numerical Method Course. Sponsorship: ITS Surabaya.
 10. 2013, Award Predicate the Best Ten of Improvement of Teaching and Learning Activities for Supporting Development of Instructional Materials as Student Center Learning (SCL) in Share ITS: Statistik Terapan / Applied Statistic Course. Sponsorship: ITS Surabaya.
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Instructional Subject Development

E-Learning Teaching Grant: Improvement of Teaching and Learning Activities. Supporting Development of Instructional Materials as Student Center Learning (SCL) in Share ITS

1. July 2020-Present, PIC on The Preparation of On-Line Courses MOOC ITS Forensic Buildings. PIC: (1) Dr. Eng. **Yuyun Tajunnisa**, ST, MT; Team: (2) Prof. Ir. M. Sigit Darmawan, M. EngSc., Ph.D.; (3) Dr. Ir. Dicky Imam Wahyudi., MS; (4) Nur Achmad Husin, ST., MT.; (5) Ir. Ibnu Pudji Rahardjo, MS; (6) Ridho Bayuaji, ST, MT., Ph.D.; (7) R. Buyung Anugraha A., ST., MT.; (8) Ir. Srie Subekti, MT; (9) Ir. Sungkono, CES; (10) Afif Navir Refani, S.T., M.T.; (11) Dimas Pustaka Dibiantara, ST., M.Sc
2. February - October 2013, The Title of E-Learning Subject: Learning to Ilmu Ukur Tanah II Become More Fun, Team: **Yuyun Tajunnisa**, Tatas, Choirul Anwar, Amalia Firdaus Mawardi, S. Kamilia Aziz.
3. February - October 2013, The Title of E-Learning Subject: The Creative Learning of Concrete and Formwork Technology based on SCL, Team: Nur Ahmad Husin, Ridho Bayuaji, **Yuyun Tajunnisa**, Ir. Sri Subekti, Ir. Sukobar, Sungkono.

4. February - October 2013, The Title of E-Learning Subject: Design and Implementation of Student Centre Learning in Numerical Method Subject Based E-Learning: Share ITS, Team: Agung Budipriyanto, **Yuyun Tajunnisa**, Sungkono.
5. February - October 2013, The Title of E-Learning Subject: Development of E-Learning Technology in Applied Statistic Course to Motivate Students to Become Learning Center, Team: Tatas, Ridho Bayuaji, S. Kamilia Aziz, **Yuyun Tajunnisa**.
6. November - February 2012, The Title of E-Learning Subject: The spirit of ITS E-Learning in Engineering Mechanics Subject (Mata Kuliah Mekanika Rekayasa) via Share ITS, Team **Yuyun Tajunnisa**, Boedi Wibowo, Ziad Al Rasyid

Speaker Experiences

1. 4-5 March 2014, Trainer in Workshop of eLearning System by Open Source Moodle for Administrators and Lecturers in CIPUTRA University.
2. 5-8 February 2014, Speaker in Applied Approach Training for ITATS's Lecturers in Surabaya. Organized by P3AI-ITS, office: 6th floor Central Library Building, ITS Campus Sukolilo
3. 23 January 2014, Speaker about Cloud Computing and E Learning for Lecturers in CIPUTRA University.
4. 10-13 December 2013, Speaker in Applied Approach Training for Lecturers in CIPUTRA University.
5. 1-4 October 2013, Speaker in Applied Approach Training for General Lecturers.
6. 28-29 May 2013, Speaker in the E-Learning Workshop using Share ITS for General Lecturers.
7. 26-27 February 2013, Speaker in E-Learning Training using Share ITS for Lecturers at Diploma of Civil Engineering FTSP-ITS, at ITS Diploma Teknik Sipil.

Publications

National and International Journals/Proceedings

1. Nur Ahmad Husin, Ridho Bayuaji, **Yuyun Tajunnisa**, Muhammad Sigit Darmawan, Priyo Suprobo, "Performance of High Calcium Fly Ash Based Geopolymer Concrete In Chloride Environment", International Journal of GEOMATE, Oct., 2020, Vol.19, Issue 74, pp.107–113, ISSN: 2186-2982 (P), 2186-2990 (O), Japan, DOI: <https://doi.org/10.21660/2020.74.56966> Geotechnique, Construction Materials and Environment
2. MS Darmawan, R Bayuaji, M Rosanti, **Y Tajunnisa**, NA Husin, "The Setting Time Pattern of High Calcium Based Geopolymer Paste Using Additive Material", Putrajaya International Conference on Advanced Research (PJIC2020), 309, 2020
3. MS Darmawan, R Bayuaji, NA Husin, RB Anugraha, **Y Tajunnisa**, "The Influence of Fine Aggregate Type on Setting Time of Mortar Geopolymer Based High Calcium Fly Ash", Putrajaya International Conference on Advanced Research (PJIC2020), 273, 2020
4. R Bayuaji, MS Darmawan, NA Husin, RB Anugraha, **Y Tajunnisa**, "The Character of Geopolymer Mortar Porosity Used Sandblasting Waste", Putrajaya International Conference on Advanced Research (PJIC2020), 221, 2020.
5. MS Darmawan, NA Husin, M Rosanti, **Y Tajunnisa**, R Buyung, "The Compressive Strength of High Calcium Fly Ash Based Geopolymer Concrete Using Various Additive For Structural Material In Indonesia", Putrajaya International Conference On Advanced Research (PJIC2020), 229, 2020.
6. R Bayuaji, MS Darmawan, NA Husin, RB Anugraha, **Y Tajunnisa**, "The Influence of Sandblasting Waste on The Compressive Strength of Fly Ash Geopolymer Mortar", Putrajaya International Conference on Advanced Research (PJIC2020), 280, 2020

7. R Bayuaji, MS Darmawan, NA Husin, RB Anugraha, **Y Tajunnisa**, "The Density Performance of Geopolymer Mortar Used Sandblasting Waste" Putrajaya International Conference on Advanced Research (PJIC2020), 238, 2020.
8. LY Ming, AV Sandu, HC Yong, **Y Tajunnisa**, SF Azzahran, R Bayuaji, "Compressive Strength and Thermal Conductivity of Fly Ash Geopolymer Concrete Incorporated with Lightweight Aggregate, Expanded Clay Aggregate and Foaming Agent", *Rev. Chim* 70, 4021-4028. 2019.
9. **Y Tajunnisa**, W Sutrisno, M Shigeishi, "Impact of PVA Fiber As Fine Aggregate Replacement In Alkali-Activated Fly Ash On Flow Rate, Mechanical Properties And Drying Shrinkage" *Geomate International Journal* 17 (63), 217-223, 2019.
10. **Y Tajunnisa**, M Shigeishi, R Bayuaji, MS Darmawan, "Reliability of Alkali-Activated and Portland Cement Mortar Under Compressive Test by Acoustic Emission" *Geomate International Journal* 17 (60), 197-203, 2019.
11. **Yuyun Tajunnisa**, Masaaki Sugimoto, Takahiro Uchinuno, Takahiro Sato, Yoshinori Toda, Arisa Hamasaki, Toru Yoshinaga, Kenji Shida and Mitsuhiro Shigeishi, "Performance of alkali-activated fly ash incorporated with GGBFS and micro-silica in the interfacial transition zone, microstructure, flowability, mechanical properties and drying shrinkage," Citation: *AIP Conference Proceedings* 1887, 020034 (2017); View online: <https://doi.org/10.1063/1.5003517>, <http://aip.scitation.org/toc/apc/1887/1>, Published by the American Institute of Physics
12. **Yuyun Tajunnisa**, Masaaki Sugimoto, Takahiro Uchinuno, Takahiro Sato, Yoshinori Toda, Arisa Hamasaki, Toru Yoshinaga, Kenji Shida and Mitsuhiro Shigeishi, "Effect of GGBFS and Micro-Silica on Mechanical Properties, Shrinkage and Microstructure of Alkali-Activated Fly Ash Mortar," *International Journal of GEOMATE*, Nov., 2017, Vol.13, Issue 39, pp.87-94 *Geotec., Const. Mat. & Env.*, ISSN:2186-2990, Japan, DOI: <https://doi.org/10.21660/2017.39.11341>
13. **Y. Tajunnisa**, M. Sugimoto, T. Sato and M. Shigeishi, "A Study on Factors Affecting Geopolymerization of Low Calcium Fly Ash," *International Journal of GEOMATE*, vol. 13, no. 36, pp. 100-107, 2017.
14. **Y. Tajunnisa**, M. Sugimoto, T. Sato, J. J. Ekaputri and M. Shigeishi, "Characterization of Low Calcium Fly Ash for Geopolymer Paste," *Structural Faults and Repair*, 2016, Edinburgh, UK
15. **Y Tajunnisa**, M Chadaffi, V Ramadhaniawan "Perbandingan Evaluasi Kinerja Bangunan Gedung Tahan Gempa antara Metode SRPMM dan SRPMK," *Jurnal Aplikasi Teknik Sipil* 12 (1), 1-16, 2014.
16. **Yuyun Tajunnisa**. et all, "Perbandingan Perancangan Gedung SRPMK di Atas Tanah dengan Kategori Tanah Lunak dan Tanah Baik.," Volume 10, Number 1, February 2013, Page 1-15, 64. *Aplikasi* ISSN.1907 - 753X.
17. D Sulistiono, AF Mawardi, **Y Tajunnisa**, "Tinjauan Teknis dan Ekonomi Penggunaan Aspal Beton dan Hot Rolled Sheet Sebagai Bahan Pelapisan Ulang Permukaan Jalan (Kasus Ruas Widang–Gresik Sta 7+ 150 s/d Sta 10+ 200)", *Jurnal Aplikasi Teknik Sipil* 7 (1), 1-5, 2009.
18. **Y Tajunnisa**, Tavio, "Seismic Design of Precast Concrete House", 2009

Books

1. *Panduan Pengembangan dan Penyelenggaraan Kuliah Daring Indonesia Terbuka dan Terpadu*", Direktorat Pembelajaran dan Kemahasiswaan, Direktorat Jenderal Pendidikan Tinggi, Kementerian Pendidikan dan Kebudayaan, Total page: 141. Team: Syamsul Arifin, Aulia Siti Aisjah, Widiyastuti, Yusuf Bilfaqih, **Yuyun Tajunnisa**, Nurahman, Fatmawati S., et al. *Desain Laboratorium Skala Mini Untuk Pembelajaran*

- Sains Terpadu (Mini Scale Laboratory Design for Integrated Science Learning) Deepublish Publisher, 2015.
2. Modul Pemetaan 1, SK: PR 1 No.13999/I2.1/PP/2011, Total page: 133. Tatas, **Yuyun Tajunnisa**, 2011
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Seminar, Symposium and Conferences

1. Characterization of Low Calcium Fly Ash For Geopolymer Paste, The 16th International Conference and Exhibition on Structural Faults and Repair, Proceeding ISBN 0-947644-8-2, Radison Blu Edinburgh, United Kingdom. 17-19 May 2016
 2. The Effect of Utilization of Local Material from South Kalimantan on the Strength of Lightweight Concrete with Foam Agent System, The 7th National Seminar Industrial Engineering and Information Technology, Proceeding page 538. STTNAS Kampus on Babarsari Road in Caturtunggal, Depok, Sleman 55281
 3. Evocative Public Participation in Flood Control, National Seminar on Aplikasi Teknologi Prasarana Wilayah, Surabaya, July 11, 2012 ISSN 2301-67
 4. Position and Strategy Development of Container of Tanjung Wangi Port, Banyuwangi, East Java , National Seminar on "Aplikasi Teknologi Prasarana Wilayah, Surabaya, July 11, 2012 ISSN 2301-67
 5. The use of Interblock as Flexible Pavement Overlay Highways (Roads Case - Bunder Legundi Sta 15+800 - 18 +800, Gresik, East Java, Indonesia), National Seminar on Aplikasi Teknologi Prasarana Wilayah, Surabaya, July 11, 2012 ISSN 2301-67
 6. Finite Difference Procedure for Easy and Accurate Simple Plate Problem, National Seminar on Aplikasi Teknologi Prasarana Wilayah, Surabaya, July 11, 2012, ISSN 2301-67
 7. Earthquake Resistance Design of Building with Pushover Analysis, The 3rd International Seminar APTECS, Surabaya, December 6, 2011
 8. Design of Precast Concrete Building with In-filled Frame Structure on Earthquake Area, National Seminar on Aplikasi Teknologi Prasarana Wilayah, Surabaya, July 21, 2011
 9. Design of Precast Concrete Building with Open Frame Structure on Earthquake Area , National Seminar on Aplikasi Teknologi Prasarana Wilayah, Surabaya, July 21, 2011
 10. Seismic Design of Precast Concrete House, National Seminar on Applied Technology, Science and Arts, Surabaya, December 22, 2009
 11. Development of Utilities Coordinating on Some Roads in the Surabaya City, National Seminar on Aplikasi Teknologi Prasarana Perkotaan, Surabaya, July 29, 2009
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