Mohammad Minnatul Karim
PhD, Molecular Microbiologist

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Summary

Motivated to work in the field of advanced life science education and research both independently or in a group.

Education

PhD, Tottori University, Japan 2010-2013

Thesis: Studies on the relationship between quorum sensing and biofilm formation of *Eikenella corrodens*
Supervisor: Prof. Hiroyuki Azakami, Yamaguchi University, Japan

Master of Agriculture, Yamaguchi University, Japan 2008-2010

Thesis: Purification and Charecterization of Autoinducer 2 from periodontopathogenic bacterium *Eikenella corrodens*

Master of Science in Microbiology, University of Dhaka, Bangladesh 2003

Thesis: Purification and characterization of alkaline protease enzyme from *Bacillus licheniformis* MZK03 strain

Bachelor of Science (4 years, Honors) in Microbiology, University of Dhaka, Bangladesh 2002

Research project: Attempt to design and optimize a selective medium for the recovery of *Escherichia coli* from surface water sample

Research Experience

Invited Researcher	Yamaguchi University, Japan	18th July 2017- 27th July 2017
Invited Researcher	Yamaguchi University, Japan	3rd March 2017- 27th March 2017
Invited Researcher	Yamaguchi University, Japan	6th June 2016- 25th July 2016
JASSO Follow up Research Fellows	Yamaguchi University, Japan	July 2015 -9th Oct. 2015

PhD Fellow **Tottori University, Japan** **2010-2013**

Research: At Prof. Dr. Hiroyuki Azakami's lab, Yamaguchi University, Japan
Skills/requirements- Evaluate Quorum sensing factors determining *Eikenella corrodens* biofilm formation (Static biofilm assay, flow cell biofilm assay, SEM, CLSM,CRM), Transposon mutant library, Quorum sensing inactivating protein purification (RP-HPLC)
Achievement- Published 2 papers in peer reviewed journals

Research Fellow as MS student **Yamaguchi University, Japan** **2008-2010**

Research: At Prof. Dr. Hiroyuki Azakami's lab, Yamaguchi University, Japan
Skills/requirements- Evaluate Quorum sensing and purification of Quorum sensing signal molecues of *Eikenella corrodens* (TLC, RP-HPLC), Study biofilm formation (Static biofilm assay
Achievement- Published 1 paper in peer reviewed journal

Scientific Officer **Bangladesh Council of Scientific and Industrial Research** **2006-2008**

Research: Production of industrially important enzyme, baker's yeast, vinegar, and soya sauce (Fermantation technology), Microbiological analysis of foods and drinks.

Research Associate as MS student **University of Dhaka, Bangladesh** **2005-2006**

Research: In Biotechnology and Molecular Genetic Laboratory Lab
Skills- Purification of industrially important enzyme (Ion exchange chromatography, SDS-PAGE)

Teaching / Other Experiences

Group Leader & Lab in charge, 2013-todate, Laboratory of Microbial Biotechnology, Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003, Bangladesh

Supervisor, 2013-2020, undergraduate (20) & postgraduate (15) students for research projects

Lab teacher, 2013-2020, Microbiology, Molecular Biology, Immunology, Bioinformatics and Protein Engineering course

Professor, June 2020-todate
Associate Professor, June 2015-June 2020

Assistant Professor, May 2010-June 2015

Lecturer, June 2006-May 2008

Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia-7003, Bangladesh: Involved as a course teacher of Microbiology, Immunology, Protein Engineering and Molecular Biology. Member, curriculum development for the Biotechnology and Genetic Engineering undergraduate and post graduate program.

Academic Awards / Fellowship

"JASSO Follow up Research Fellowship" 12th July 2015 ~ 9th Oct. 2015, awarded by Ministry of Education, Culture, Sports, Science and Technology, JAPAN, at Yamaguchi University, Japan

Fiscal 2013 Japan Society for Bioscience, Biotechnology, and Agrochemistry Shikoku Branch Student Award

"**Monbukagakusho Scholarship**" Oct. 2010 ~ Sept. 2013, awarded by Ministry of Education, Culture, Sports, Science and Technology, JAPAN, for Doctoral Program at *Tottori University*, Japan

"**Monbukagakusho Scholarship**" Oct. 2008~ Sept. 2010 awarded by Ministry of Education, Culture, Sports, Science and Technology, Japan, for Masters Program at *Yamaguchi University*, Japan

"**Provost award**" June, 2006, awarded by University of Dhaka, Bangladesh for obtaining good results in the in B. Sc. Honours in Microbiology

Techniques Known

Molecular biology/genetics & Bioinformatics: Design of PCR primers; total RNA, mRNA, and DNA extraction from samples; cDNA synthysis; Conventional PCR, Colony PCR, Real-Time PCR, Reverse Transcriptase PCR, Transformation, Cloning, Electroporation, DNA sequence analysis using BLAST and GENETIX, Different tools of Bioinformatics (Genomics & Proteomics) etc.
Analytical Methods and Data analysis: Reducing sugar, soluble protein, total protein and enzyme assay; Separation/purification of carbohydrate/protein/toxin by Thin Layer Chromatography/Affinity chromatography/Ion-exchange chromatography/HPLC, SDS-PAGE, TLC, Western blotting etc.
Immunology: Preparation of antigen for immunization; Immunoblotting; Antigen antibody reaction determination by the Ouchterlony's double Diffusion technique; ELISA
Microbiology & Microscopy: Biofilm study in static condition and flow cell condition, Quorum sensing and Quorum quenching, light microscopy, phase-contrast microscopy, Electron Microscopy and Confocal Microscopy, Isolation and identification of pathogens from different sources, ELISA, antimicribial sensitivity test, Preservation & maintenance of stock cultures, etc..

Selected Publications

1. Md. Sabbir Hasan, Jannat Al Foisal, G. M. Arifuzzaman Khan, Rownok Jahan, Md. Hasanuzzaman, Md. Shamsul Alam, **M. Minnatul Karim**, M. A. Gafur, Muhammad Angkan Khan, Md. Abdus Sabur. Microfbrillated Cellulose-Silver Nanocomposite Based PVA Hydrogels and Their Enhanced Physical, Mechanical and Antibacterial Properties. Journal of Polymers and the Environment, February 2022.
2. Zulkar Nain , Shital K. Barman, Md. Moinuddin Sheam , Shifath Bin Syed , Abdus Samad , Julian M. W. Quinn, **Mohammad Minnatul Karim** , Mahbubul Kabir Himel, Rajib Kanti Roy, Mohammad Ali Moni and Sudhangshu Kumar Biswas. Transcriptomic studies revealed pathophysiological impact of COVID-19 to predominant health conditions. Briefings in Bioinformatics, 00(00), 1–15, 02 June 2021.
3. Md. Abdullah Al Masud, Hamid Shaikh, Md. Shamsul Alam, **M. Minnatul Karim**, M. Abdul Momin, M. Ariful Islam and G. M. Arifuzzaman Khan. Green synthesis of silk sericin-embedded silver nanoparticles and their antibacterial application against multidrug-resistant pathogens. Journal of Genetic Engineering and Biotechnology, 19 (1) :74, May 17, 2021.
4. Zulkar Nain and **Mohammad Minnatul Karim**. Whole-genome sequence, functional annotation, and comparative genomics of the high biofilm-producing multidrug-resistant *Pseudomonas aeruginosa* MZ4A isolated from clinical waste. Gene Reports, Volume 22, 100999, March 2021.
5. Md. Shakil Ahmed Khan, Zulkar Nain, Shifath Bin Syed, Faruq Abdulla, Mohammad Ali Moni, Md. Moinuddin Sheam, **Mohammad Minnatul Karim** and Utpal Kumar Adhikari. Computational formulation and immune dynamics of a multi-peptide vaccine candidate against Crimean-Congo hemorrhagic fever virus. Molecular and Cellular Probes, Volume 55, 101693, February 2021.
6. Zulkar Nain , Fariha Jasin Mansur , Shifath Bin Syed , Md Ariful Islam , Hiroyuki Azakami , Md Rezuanul Islam & **Mohammad Minnatul Karim**. Inhibition of biofilm formation, quorum sensing and other virulence factors in *Pseudomonas aeruginosa* by polyphenols of Gynura procumbens leaves. Journal of Biomolecular Structure & Dynamics, 1-15, Jan 6, 2021.
7. Md. Chayan Ali, Anjumana Jannati Nur, Mst. Shanzeda Khatun, Raju Dash, Md Mafizur Rahman and **Mohammad Minnatul Karim**. Identification of potential SARS-CoV-2 main protease inhibitors from Ficus Carica Latex: An in-silico approach. Journal of Advance Biotechnology and Experimental Therapeutics, 3(4), 57-67, Dec, 2020.
8. Ryohei IIDA, Shogo TANIGUCHI, Ayasa YOSHIMATSU, Miyuki YANAI, Masayuki HIRATA, **Mohammad Minnatul KARIM** and Hiroyuki AZAKAMI. *Lentinula edodes* methanol extract inhibits biofilm formation and autoinducer-2 production by *Eikenella corrodens*, a periodontopathogenic bacterium. Mushroom Science and Biotechnology, Vol. 28(2), 68-75, July 2020.
9. M. Mizanur Rahman, Kamrun Nahar, Md. Meraj Ali, Nasrin Sultana, **Mohammad Minnatul Karim,** Utpal Kumar Adhikari, Mamoona Rauf & Md. Abul Kalam Azad. Effect of Long-Term Pesticides and Chemical Fertilizers Application on the Microbial Community Specifically Anammox and Denitrifying Bacteria in Rice Field Soil of Jhenaidah and Kushtia District, Bangladesh. Bulletin of Environmental Contamination and Toxicology, 104(6), 828-833, May 2020.
10. Kariul Rakib, Zulkar Nain, Bulbul Ahammed, **Mohammad Minnatul Karim**. Developing *Pseudomonas aeruginosa* mutants with hyper-proteolytic activity through UV mutagenesis and characterization for optimized production. Journal of Advance Biotechnology and Experimental Therapeutics. Vol. 3, Issue 2, 135-142, May 2020.

11. Zulkar Nain, **Mohammad Minnatul Karim**, Monokesh Kumer Sen and Utpal Kumar Adhikari. Structural basis and designing of peptide vaccine using PE-PGRS family protein of Mycobacterium ulcerans—An integrated vaccinomics approach. Molecular Immunology, Volume 120, Pages 146-163, April 2020.
12. Zulkar Nain, Utpal Kumar Adhikari, Faruq Abdullah, Nahid Hossain, Nirmal Chandra Barman, Fariha Jasin Mansur, Hiroyuki Azakami, **Mohammad Minnatul Karim**. Computational Prediction of Active Sites and Ligands in Different AHL Quorum Quenching Lactonases and Acylases. Journal of Biosciences, Vol. 45, Issue 26, 1-19, January 2020.
13. Zulkar Nain, Sifat Bin Sayed, **Mohammad Minnatul Karim**, Md. Ariful Islam, Utpal Kumar Adhikari. Energy-Optimized Pharmacophore Coupled Virtual Screening in the Discovery of Quorum Sensing Inhibitors of LasR Protein of *Pseudomonas aeruginosa.* Journal of Biomolecular Structure & Dynamics, Vol. 38, Issue 18, 5374-5388, 2020.
14. Zulkar Nain, Faruq Abdulla, M. Mizanur Rahman, **Mohammad Minnatul Karim**, Shakil Ahmed Khan, Sifat Bin Sayed, Shafi Mahmud, S. M. Raihan Rahman, Md. Moinuddin Sheam, Zahurul Haque, Utpal Kumar Adhikari. Proteome-wide Screening for Designing a Multi-epitope Vaccine against Emerging Pathogen Elizabethkingia anophelis using Immunoinformatic Approaches. Journal of Biomolecular Structure & Dynamics, Vol. 38, Issue 16, 4850-4867, 2020.
15. Md. Aminul Islam Apu, Shamsun Nahar Jolly, **Mohammad Minnatul Karim**. Assessment of microbiological quality and anti-bacterial traits of oral liquid drugs used in Bangladesh. International Journal of Pharmaceutical Science and Research. Vol. 4, Issue 4, 38-40, October 2019.
16. Zulkar Nain, Md. Ariful Islam, **Mohammad Minnatul Karim**: Antibiotic Resistance Profiling and Molecular Phylogeny of Biofilm Forming Bacteria From Clinical and Non-clinical Environment in Southern Part of Bangladesh. International Journal of Enteric Pathogens. Vol. 7, Issue 2, pp. 37-43, May 2019
17. S. M. Raihan Rahman, Md. Nazim Uddin, Zulkar Nain, **Mohammad Minnatul Karim**: Screening for microbial load and antibiotic resistance pattern in *Escherichia coli* isolated from paper currency circulating in Kushtia, Bangladesh. International Journal of Research in Medical Sciences. Vol. 7, Issue 4, pp. 1161-1165, April, 2019
18. Muslima Jahan, Md. Abuhena, Abul Kalam Azad and **Mohammad Minnatul Karim**: *In vitro* antibacterial and antibiofilm activity of selected medicinal plants and spices extracts against multidrug resistant *Pseudomonas aeruginosa*. Journal of Pharmacognosy and Phytochemistry. Vol. 7, Issue 3, pp. 2114-2121, May-June, 2018
19. Fariha Jasin Mansur, Sari Takahara, Mihoko Yamamoto, Masafumi Shimatani, **Mohammad Minnatul Karim**, Yuichiro Noiri, Shigeyuki Ebisu & Hiroyuki Azakami: Purification and characterization of hemolysin from periodontopathogenic bacterium *Eikenella corrodens* strain 1073. Bioscience, Biotechnology, and Biochemistry. Vol.81, No.6, pp. 1246-1253, February, 2017
20. FJ Mansur, L Barai, **MM Karim**, JA Haq, K Fatema, and MO Faruq: Intravascular catheter related infections and antimicrobial susceptibility pattern of isolated bacteria in a tertiary care hospital of Bangladesh, Indian Journal of Medical Microbiology, Vol. 32, No 1, pp. 68-71, January, 2014
21. Md. Khasrul Alam, Fariha Jasin Mansur, **Mohammad Minnatul Karim** and Md. Anwarul Haque: Antimicrobial activity of *swietenia mahagoni* (seed) against various pathogenic microbes, Indo American Journal of Pharmaceutical Research, Vol.4, No 5, pp. 2362-2366, May, 2014
22. **Mohammad Minnatul Karim**, Tatsunori Hisamoto, Tetsuro Matsunaga, Yoko Asahi, Yuichiro Noiri, Shigeyuki Ebisu, Akio Kato, and Hiroyuki Azakami: LuxS Affects Biofilm Maturation and Detachment of the Periodontopathogenic Bacterium *Eikenella corrodens*, Journal of Bioscience and Bioengineering, Vol.116, No. 3, 313-318, September, 2013
23. **Mohammad Minnatul KARIM**, Ayako NAGAO, Fariha Jasin MANSUR, Tetsuro MATSUNAGA, Yoshihiko AKAKABE, Yuichiro NOIRI, Shigeyuki EBISU, Akio KATO, and Hiroyuki AZAKAMI:

The Periodontopathogenic Bacterium *Eikenella corrodens* Produces an Autoinducer-2-Inactivating Enzyme, Bioscience, Biotechnology, and Biochemistry, Vol.77, No.5, pp. 1080-1085, May, 2013

24. Tetsuro MATSUNAGA, Aya NAKAHARA, **M. Minnatul KARIM**, Yuichiro NOIRI, Shigeyuki EBISU, Akio KATO, and Hiroyuki AZAKAMI: The inhibitory effect of catechins on biofilm formation by the periodontopathogenc bacterium, *Eikenella corrodens*, Bioscience, Biotechnology, and Biochemistry, Vol.74, No.12, pp. 2445-2450, December, 2010

List of presentation in Seminar/Poster presentation/Workshop/Trainings

2021

○ Joined an e-symposium on "Host-pathogen interaction in inflammatory and infectious diseases" organized by Department of Microbiology, Stamford University Bangladesh, February 13, 2021

○ Joined International E-conference on "Microbiology: Covid 19 and and current issues", organized by Department of Microbiology, Primeasia University, Bangladesh, January 31, 2021

2020

○Anjumana Jannati Nur and **Mohammad Minnatul Karim**. Isolation and Identification of *Trichoderma viride* from Soil. 34th Bangladesh Society of Microbiology Annual Conference (International e-Conference), December 19-20, 2020.

○Md. Shakil Ahmed Khan, Shifath Bin Syed, Md. Masudur Rahman and **Mohammad Minnatul Karim**. Prevalence of multidrug-resistant *Acinetobacter Baumannii* in a tertiary care hospital environment. 34th Bangladesh Society of Microbiology Annual Conference (International e-Conference), December 19-20, 2020.

○Joined a webinar entitled "Career Focus on Clinical & Diagnostic Microbiology", organized by International Society of Bangladesh-affiliated Microbiologists (ISBM), November 14, 2020.

○Shifath Bin Syed, Md. Moinuddin Sheam, Md. Shakil Ahmed Khan, Md. Masudur Rahman and **Mohammad Minnatul Karim**. International E- Conference on Biotechnology, Bioinformatics & Biomedicine, organized by AIMST University, Malyasia, August 24-26, 2020.

○Joined a webinar entitled "Promoting Academia-Industry Partnership in the Light of COVID-19 Crisis: Way Forward" organized by Asian Federation of Biotechnology (AFOB, Bangladesh Region) & (Committee of Action for Research , Extension and Services (CARES), Bangladesh, August 22, 2020.

○Joined a webinar entitled "COVID-19: Therapeutic Development, and Capabilities and Limitations in the Context of Bangladesh organized by International Society of Bangladesh-affiliated Microbiologists (ISBM), August 16, 2020.

〇Joined a webinar entitled "Towards effective COVID-19 vaccines: Possibilities and Challenges" organized by International Society of Bangladesh-affiliated Microbiologists (ISBM), July 26, 2020.

〇Joined a webinar entitled "Laboratory diagnosis of COVID-19: Sharing COVID-19 testing experience Bangladesh perspective", July 18, 2020.

〇Joined a webinar entitled "Detection of SARS-CoV-2 by Rapid Antigen, Molecular and Antibody-Based Assays" organized by International Society of Bangladesh-affiliated Microbiologists (ISBM), July 4, 2020.

〇Joined a webinar entitled "Detection of SARS-CoV-2 by Rapid Antigen, Molecular and Antibody-Based Assays" organized by International Society of Bangladesh-affiliated Microbiologists (ISBM), June 20, 2020.

2019

〇Sumana Hasan, Zulkar Nain, **Mohammad Minnatul Karim**. Production of protease enzyme by using soil isolates. 33rd Annual conference of BSM, 26th December 2019, University of Dhaka, Bangladesh.

〇Samina haque, Md. Rezuanul Islam, **Mohammad Minnatul Karim**. Production of Chitinase by using soil isolates. 33rd Annual conference of BSM, 26th December 2019, University of Dhaka, Bangladesh.

〇Md. Abdus Sabur, Md. Mizanur Rahman, Sudangshu Kumar Biswas, **Mohammad Minnatul Karim**. Partial purification of antifungal peptides from *Pseudomonas aeruginosa* strains. 33rd Annual conference of BSM, 26th December 2019, University of Dhaka, Bangladesh.

〇Mohammad Angkon Khan, Md. Khasrul Alam, Md. Abu Hena Mostofa Jamal, **Mohammad Minnatul Karim**. Partial purification of antibacterial peptide from *Pseudomonas aeruginosa* strains. 33rd BSM Annual conference, 26th December 2019, University of Dhaka, Bangladesh.

〇 Zulkar Nain, Utpal Kumar Adhikari, Faruq Abdullah, Mizanur Rahman, Nilufa Akhter Banu, and **Mohammad Minnatul Karim**. Proteome-wide screening for the highest antigenic protein and designing of multiepitope vaccine against emerging pathogen *Elizabethkingia anopheles* using immunoinformatic approaches. National Conference on DNA and Genome research for sustainable development in agriculture and health. World DNA Day Conference, 02-03 May, 2019, University of Rajshahi, Bangladesh.

〇 Kariul Rakib, Zulkar Nain, Bulbul Ahammed, Sumona Hasan and **Mohammad Minnatul Karim**. Selection and Optimization of UV-induced *Pseudomonas aeruginosa* Mutant for Enhanced Production of Alkaline Protease. 32nd BSM Annual conference, 6th April 2019, Jashore University of Science & Technology.

〇 Joined in national seminar on "National Seminar on Food Safety and Biotechnology: Bangladesh Perspective" 10th March 2019, Jahangirnagar University (JU), Dhaka, Bangladesh

〇 Joined in International Workshop on "Genome editing for the development of climate resilient novel blast resistant wheat variety", 25th February 2019 (BSMRAU), Gazipur, Bangladesh

2018

- Zulkar Nain, Md. Abul Kalam Azad and **Mohammad Minnatul Karim**: Study of antibiofilm effect of *Gynura procumbens* (Lour.) Merr. leaf extract against multidrug resistant pathogenic bacteria. 10th Asian Federation of Biotechnology (AFOB) Regional Symposium (ARS 2018), January 27-29, 2018, University of Dhaka, Dhaka 1000, Bangladesh

2017

- Joined in 3rd National workshop on Bioinformatics and Computational Biology, (Islamic University, Kushtia, Bnagladesh, 8-9 April, 2017)

- Joined in workshop and Annual Conference 2017 on Biosafety and Biosecurity: Challenges for Sustainable Development in Health and Agriculture, organized by Bangladesh Biosafety and Biosecurity Association (BBBA), 5-7 December 2017, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka-100, Bangladesh

2014

- Mansur Jasin, **Karim Minnatul**, Yuichiro Noiri, Hiroyuki Azakami: Purification and characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. IUMS 2014 (Montreal, Canada, 2014 July)

- Muslima Jahan, **M. Minnatul Karim**, Hossain M. Faruquee, A.K.M. Nazmul Huda, S. Kumar Biswas, H. Azakami: LuxS Affects Biofilm Maturation and Detachment of the Periodontopathogenic Bacterium *Eikenella corrodens.* Conference on Biotechnology for Better Tomorrow 2014, (IBS, University of Rajshahi, Bangladesh, March 2014)

2013

- Mansur Jasin, **Karim Minnatul**, Ayako Nagao, Hiroyuki Azakami: Purification and characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. 8th Young Scientist Seminar (Yamaguchi, October 2013)

- Mansur Jasin, **Karim Minnatul**, Hiroyuki Azakami: Characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. Annual Meeting of Chugoku-Shikoku Branch of Japanese Society for Bacteriology (Kure, 2013 October)

- Hiroyuki Azakami, Mansur Jasin, **Karim Minnatul**, Yuichiro Noiri: Does soluble porin inactivate autoinducer-2 in periodontopathogenic bacterium *Eikenella corrodens*?. Annual Meeting of Society for Biotechnology, Japan (Hiroshima, 2013 September)

- Hiroyuki Azakami, Mansur Jasin, **Karim Minnatul**, Akio Kato: Does soluble porin from periodontopathogenic bacteria change intercellular communication among bacteria?. Annual Meeting of Chu-Shikoku Branch of the Japan Society for Bioscience, Biotechnology, and Agrochemistry, (Hiroshima, 2013 September)

○Mansur Jasin, **Karim Minnatul**, Yuichiro Noiri, Shigeyuki Ebisu, Hiroyuki Azakami: *Eikenella corrodens* produces an autoinducer-2-inactivating enzyme, *Nobel Conference on Biofilm formation, its clinical impact and potential treatment* (Stockholm, Sweden, 2013 August)

○**Karim Minnatul**, Mansur Jasin, Tatsunori Hisamoto, Tetsuro Matsunaga, Yoko Asahi, Yuichiro Noiri, Shigeyuki Ebisu, Akio Kato, Hiroyuki Azakami: LuxS affects biofilm maturation and detachment of the periodontopathogenic bacterium *Eikenella corrodens*, *Nobel Conference on Biofilm formation, its clinical impact and potential treatment*. (Stockholm, Sweden, 2013 August)

○ Hiroyuki Azakami, **Karim Minnatul**, Mansur Jasin, Yuichiro Noiri, Shigeyuki Ebisu: The Periodontopathogenic Bacterium *Eikenella corrodens* Produces an Autoinducer-2-Inactivating Enzyme, *Gordon Conference (Bacterial Adhesion & Signal Transduction)*, (Newport, USA, 2013 July)

○Hiroyuki Azakami, **Karim Minnatul**, Mansur Jasin, Yuichiro Noiri, Shigeyuki Ebisu: Purification and characterization of an autoinducer-2-inactivating enzyme in the periodontopathogenic bacterium *Eikenella corrodens*, Annual Meeting of Bacterial Adherence & Biofilm (Tokyo, 2013 July)

○**Karim Minnatul**, Mansur Jasin, Yuichiro Noiri, Shigeyuki Ebisu, Hiroyuki Azakami: Purification and characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. Annual Meeting of the Japan Society for Bioscience, Biotechnology, and Agrochemistry, (Sendai, 2013 March)

2012

○Mansur Jasin, **Karim Minnatul**, Ayako Nagao, Hiroyuki Azakami: Purification and characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. Annual Meeting of the Molecular Biology Society, Japan (Fukuoka, 2012 December)

○Mansur Jasin, **Karim Minnatul**, Ayako Nagao, Hiroyuki Azakami: Purification and characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. Brawijaya Iternational Agriculture 2012 (Malang, Indonesia, 2012 December)

○**Karim Minnatul**, Tatsunori Hisamoto, Yuichiro Noiri, Shigeyuki Ebisu, Hiroyuki Azakami: Effect od Autoinducer-2 on biofilm formation of periodontopathogenic bacterium *Eikenella corrodens*. Brawijaya Iternational Agriculture 2012 (Malang, Indonesia, 2012 December)

○**Karim Minnatul**, Mansur Jasin, Yuichiro Noiri, Shigeyuki Ebisu, Hiroyuki Azakami: Purification and characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. Annual Meeting of Chugoku-Shikoku Branch of Japanese Society for Bacteriology (Tokushima, 2012 October)

○Yayoi Matsuura, **Karim Minnatul**, Akio kato, Hiroyuki Azakami: Transposon analysis of pathogenic factors in periodontopathogenic bacterium *Eikenella corrodens*. Annual Meeting of Chu-Shikoku Branch of Japan Society for Bioscience, Biotechnology, and Agrochemistry. (Ube, 2012 September)

○ Mansur Jasin, **Karim Minnatul**, Aayako Nagao, Akio Kato, Hiroyuki Azakami: Purification and characterization of autoinducer-2 inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*. Annual Meeting of Chu-Shikoku Branch of Japan Society for Bioscience, Biotechnology, and Agrochemistry（Ube, 2012 September）

○ **Mohammad Minnatul Karim,** Hiroyuki Azakami: Identification of quorum sensing related genes in periodontopathogenic bacterium *Eikenella corrodens*. 6th Young Scientist Seminar. (Yamaguchi, 2012 September)

○ Chaired a scientific session in group discussion in 6th Young Scientist Seminar. (Yamaguchi, 2012 September)

○ **Karim Minnatul**, Ayako Nagao, Akio Kato, Shigeyuki Ebisu, Hiroyuki Azakami: Analysis of autoinducer 2-degrading enzyme in periodontopathogenic bacterium *Eikenella corrodens*, Annual Meeting of Japan Society for Bioscience, Biotechnology, and Agrochemistry (Kyoto, 2012 March)

2011

○ **Mohammad Minnatul Karim,** Akio Kato, Hiroyuki Azakami: Identification of quorum sensing related genes in *Eikenella corrodens*. Poster presentation. Annual Meeting of Chu-Shikoku Branch of Japan Society for Bioscience, Biotechnology, and Agrochemistry（Ube, 2011 December）

○ **Mohammad Minnatul Karim,** Hiroyuki Azakami: Effect of autoinducer-2 on biofilm formation of periodontopathogenic bacterium *Eikenella corrodens*. 5th Young Scientist Seminar.（Yamaguchi, 2011, November 22th-23th）

○ Attended as a Master of Ceremony, Chaired a scientific session in a group discussion and in a speech of invited speaker in 5th Young Scientist Seminar. (Yamaguchi, 2011, November 22th-23th)

○ Ayako Nagao, **Karim Minnatul**, Akio Kato, Shigeyuki Ebisu, Hiroyuki Azakami: Study on degradation of autoinducer 2 in periodontopathogenic bacterium *Eikenella corrodens*, Annual Meeting of Society of Biotechnology, Japan（Tokyo, 2011 September）

○ **Karim Minnatul**, Akio Kato, Shigeyuki Ebisu, Hiroyuki Azakami: Autoinducer 2 from periodontopathogenic bacterium, *Eikenella corrodens*, interconverts between several functional forms. Annual Meeting of Japan Society for Bioscience, Biotechnology, and Agrochemistry (Nagoya, 2011 March)

2010

○Ayako Nagao, **Karim Minnatul**, Tetsuro Matsunaga, Akio Kato, Hiroyuki Azakami: Purification and characterization of autoinducer 2-degrading enzyme in periodontopathogenic bacterium *Eikenella corrodens*. Annual Meeting of Society of Biotechnology, Japan (Miyazaki, 2010 October)

○**Mohammad Minnatul Karim**, Hiroyuki Azakami: Purification and characterization of autoinducer from periodontopathogenic bacterium *Eikenella corrodens*. 3rd Young Scientist Seminar on "Capacity Building and Development of Microbial Potential and Fermentation Technology towards New Era" (September 4-5, 2010) Seminar Park, Yamaguchi, Japan.

○Ayako Nagao, **Karim Minnatul**, Tetsuro Matsunaga, Akio Kato, Hiroyuki Azakami: Purification and characterization of autoinducer 2-inactivating enzyme in periodontopathogenic bacterium *Eikenella corrodens*, Regular meeting of Chu-Shikoku Branch of Japan Society for Bioscience, Biotechnology, and Agrochemistry (Higashi-Hiroshima, 2010 June)

○**Karim Minnatul**, Ayako Nagao, Tetsuro Matsunaga, Akio Kato, Shigeyuki Ebisu, Hiroyuki Azakami：Characterization of autoinducer 2 from periodontopathogenic bacterium, *Eikenella corrodens*.、Annual Meeting of Japan Society for Bioscience, Biotechnology, and Agrochemistry（Tokyo, 2010 March）

○ Ayako Nagao, **Karim Minnatul**, Tetsuro Matsunaga, Akio Kato, Hiroyuki Azakami: Analysis of autoinducer 2 in periodontopathogenic bacterium *Eikenella corrodens*, Regular meeting of Chu-Shikoku Branch of Japan Society for Bioscience, Biotechnology, and Agrochemistry (Matsuyama, 2010 January)

2009

○**Mohammad Minnatul Karim**, Akio Kato, Hiroyuki Azakami: Characterization and purification of autoinducer-2 from *Eikenella corrodens.* Poster Presentation. Annual Meeting of Chu-Shikoku Branch of Japan Society for Bioscience, Biotechnology, and Agrochemistry. (Yamaguchi, 2009 December)

○Tetsuro Matsunaga, **Karim Minnatul**, Tatsunori Hisamoto, Ayako Nagao, Akio Kato, Hiroyuki Azakami: Analysis of autoinducer 2 in periodontopathogenic bacterium *Eikenella corrodens*. Regular meeting of Chu-Shikoku Branch of Japan Society for Bioscience, Biotechnology, and Agrochemistry (Naha, 2009 October)

○Tetsuro Matsunaga, **Karim Minnatul**, Tatsunori Hisamoto, Ayako Nagao, Shigeyuki Ebisu, Akio Kato, Hiroyuki Azakami: Analysis of autoinducer-2 in periodontopathogenic bacterium *Eikenella corrodens*, Annual Meeting of Society of Biotechnology, Japan (Nagoya, 2009 September)

○Tetsuro Matsunaga, Tatsunori Hisamoto, **Karim Minnatul**, Mitsuka Ono, Akio Kato, Hiroyuki Azakami: Effect of autoinducer on biofilm formation of periodontopathogenic bacterium *Eikenella corrodens*, Annual Meeting of Japan Society for Bioscience, Biotechnology, and Agrochemistry（Fukuoka, 2009 March）

2005

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