

# **OTGONBAYAR BATAA**

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# **EDUCATION**

<ul> <li>Professor, Mongolian University of Science and Technology, Mongolia</li> <li>Associate professor, Mongolian University of Science and Technology.</li> <li>Department of Radio communication, Mongolian University of Science and Technology</li> </ul>	2004 1998
<ul> <li>Ph.D. in Technical Science in Communication engineering         Dissertation: "Иследование параметров и разработка метода синтеза речи Монгольского языка и их возможности применения в технике связи"     </li> </ul>	1996
<ul> <li>Master of Science in Radio communication, Mongolian University of Science and Technology, Mongolia.</li> <li>Bachelor of Engineering in Radiocommunication.</li> </ul>	1995
<ul> <li>Mongolian National University.</li> <li>The Secondary Education School no. 1, Ulaanbaatar, Mongolia.</li> <li>Full Secondary Education</li> </ul>	1973-1978 1963-1973
WORK EVERIFICE	
<ul> <li>WORK EXPERIENCE</li> <li>Contract Consulting professor of Department of Communication Engineering present</li> </ul>	2023-to
<ul> <li>Consulting professor of Department of Communication Engineering,</li> <li>School of Information and Communication Technology, Mongolian University of</li> <li>Science and Technology</li> <li>Head of Department Wireless communication, School of Information and</li> </ul>	2015-2023
<ul> <li>Communication Technology, Mongolian University of Science and Technology.</li> <li>Professor of Satellite and Wireless communications Team, Mongolian University of</li> </ul>	2010-2015
Science and Technology.	2003-2010
<ul> <li>Invited Researcher, Radio Transmission Technology Research Department,</li> <li>Electronics and Telecommunications Research Institute, (ETRI), Korea.</li> <li>Professor of Satellite and Wireless communications Team, Mongolian University of</li> </ul>	2002-2003
Science and Technology.	2001-2002
<ul> <li>Head of Department of Radio Communication, Mongolian University of Science</li> <li>and Technology.</li> <li>leading professor of Wireless communication and broadcasting technology</li> </ul>	1992-2002
<ul> <li>professors team.</li> </ul>	1991-2002
<ul> <li>Lecturer and senior lecturer, Department of Radio Communication, Mongolian</li> <li>Technical University.</li> </ul>	1978-1991
OTHER TRAINING: International training course on Small Satellite Missions and design, Bengaluru, India Training on Japan space systems, Japan. 2012	2016
Invited Professor, Technical University, Darmstadt, Germany Moscow University of Information and Telecommunication post-doctoral study, Supported by The Korea Foundation for Advanced Studies, Korea. USA, UVSC "Administration of Higher Education and American Studies" course Training to trainers, Supported by Korea Telecom International (KTI) in Mongolia.	2006 2005 2002 - 2003 2001 1996

## 2024

- E.Narantuya, B.Otgonbayar, A Study on the evaluation of the ICT development indexes and some results. International Conference on Advanced Communication Technology ICACT2024, Pyeong Chang, Korea. ISSN 1738-9445, https://www.icact.org/program/papers.asp
- V.Narantuya, N.Chuluunbandi, B.Tuyatsetseg, L.Erdenebayar, B.Otgonbayar, An Efficient Resource Allocation Algorithm for Traffic of Content Streaming in Non-Standalone OFDM-Based 5G NR, International Conference on Advanced Communication Technology ICACT2024, Pyeong Chang, Korea. ISSN 1738-9445

## 2023

- Batzorig Bazargur, Otgonbayar Bataa, U, Reliability Study for Communication System:
   A Case Study of an Underground Mine, MDPI Applied Sciences, Journal IF-2.8 https://doi.org/10.3390/app13020821,20 Published: 6 January 2023.
- 2. Erdenebayar L, Otgonbayar B, Chuluunbandi N, Investigating User-Level and System-Level Packet Scheduling Performance in, LTE ICT Focus, 2023. ISSN 2958-3187 (Print) eISSN 2958-1575 (Online)
- Л.Эрдэнэбаяр, Б.Отгонбаяр, Н.Чулуунбанди, Г.Хишигжаргал, С.Батдалай, Ч.Ганбаатар, Кооператив эрэмбэлэлттэй дарааллын хуваарилалтын алгоритмд зориулсан генетик алгоритм дээр суурилсан тоглоомын онолын судалгаа, ШУТИСын ЭШБ-ийн эмхтгэл, 2023.

• 2022

• Б.Отгонбаяр, Л.Эрдэнэбаяр, Н.Чулуунбанди, Г.Хишигжаргал, С.Батдалай, Ч.Ганбаатар, The development of the game-theory approach based on genetic algorithm for cooperative ranked queue scheduling in a healthcare network, The 8th International Integrated Conference & Concert on Convergence, IICCC 2022 in conjunction with ICOOC 2022, ICCPND 2022, MIU, Mongolia, 2022.

- U.Buyankhishig, B.Otgonbayar, Xujie Li, A Resource allocation of D2D in 5G Mobile communication, eNation-100, page 51, International conference proceeding, 2021, ISBN: 978-9919-506-36-0
- R.Bayarmaa, К.Киношита, L.Erdenebayar, B.Otgonbayar, Channel sharing optimization in LTE/WiFi hybrid network, eNation-100, page 78, International conference proceeding, 2021, ISBN: 978-9919-506-36-0
- M.Baasanjargal, B.Otgonbayar, A comparative study of 5G core network implementation options, eNation- 100, page 160, International conference proceeding, 2021, ISBN: 978-9919-506-36-0
- E.Narantuya, N.Chuluunbandi, B.Otgonbayar, Some issues related to organizing of the defense sector association in emergency situations, eNation-100, page 51, International conference proceeding, 2021, ISBN: 978-9919-506-36-0
- B.Nyambayar, B.Otgonbayar, Inactive infrastructure needs in 5G Network, eNation-100, page 177, International conference proceeding, 2021, ISBN: 978-9919-506-36-0
- E.Otgonzaya, B.Otgonbayar, Some results of resource allocation in 5G network, eNation-100, page 192, International conference proceeding, 2021, ISBN: 978-9919-506-36-0
- B.Michidmaa, B.Otgonbayar, 5G Массив MIMO beamforming, eNation-100, page 200, International conference proceeding, 2021, ISBN: 978-9919-506-36-0
- E.Narantuya, B.Otgonbayar, Information, and Communication Technology Development Index Survey, eNation-100, page 200, International conference proceeding, 2021, ISBN: 978-9919-506-36-0

- E. Narantuya, B. Otgonbayar, "Analysis of ICT Development Index Based on Entropy" International Journal of Innovative Research in Computer and Communication Engineering, Volume 8, Issue 10, October 2020
- E. Narantuya, B.Otgonbayar, Entropy weight method for evaluating indicators of ICT development index, International Journal of Current Advanced Journal, Volume 9, ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact factor 6.614; Issue 12 (C); December 2020; Page No.23500-23504.
- E. Narantuya, B.Otgonbayar, Analysis of ICT Development Index Based on Entropy, International Journal of Innovative Research in Computer and Communication Engineering; Impact Factor: 7.488; Volume 8, Issue 10, October 2020. <a href="https://www.researchgate.net/publication/345984694\_Analysis\_of\_ICT\_Development\_Index\_Based\_on\_Entropy">https://www.researchgate.net/publication/345984694\_Analysis\_of\_ICT\_Development\_Index\_Based\_on\_Entropy</a>
- Batzorig Bazargur, Otgonbayar Bataa, Uuganbayar Budjav "New reliability model for Radio communication network for Underground mining"., Mongolia Journals Online. Proceedings of the Mongolian Academy of Sciences. The Proceedings of the Mongolian Academy of Sciences (PMAS) is included on DOAJ, Google Scholar, Dimensions, and CNKI. 2020.
- B.Batzorig, Otgonbayar, "Reliability analysis of underground mining radio communication systems using dynamic modeling". 2020. Proceeding MMT2020.

### 2019 он

- Batzorig B, Otgonbayar B, Analysis of Radio Communication Network in Underground mining for emergencies, IEEE, 21st International Conference on Advanced Communication Technology (ICACT) 2019, Pyeong Chang, Korea. <a href="https://ieeexplore.ieee.org/xpl/conhome/8694794/proceeding?isnumber=8701885&sortype=vol-only-seq&searchWithin=otgonbayar%20bataa">https://ieeexplore.ieee.org/xpl/conhome/8694794/proceeding?isnumber=8701885&sortype=vol-only-seq&searchWithin=otgonbayar%20bataa</a>
- E. Narantuya, B.Otgonbayar, Determining ICT indicators using entropy theory, IEEE,
   21st International Conference on Advanced Communication Technology (ICACT) 2019,
   Pyeong Chang, Korea.
   <a href="https://ieeexplore.ieee.org/xpl/conhome/8694794/proceeding?isnumber=8701885&sortype=vol-only-seq&searchWithin=otgonbayar%20bataa">https://ieeexplore.ieee.org/xpl/conhome/8694794/proceeding?isnumber=8701885&sortype=vol-only-seq&searchWithin=otgonbayar%20bataa</a>
- Batzorig B, Otgonbayar B, Reliability analysis of communication systems with two parallel devices, MMT2019, pages 48-51, 2019, Ulaanbaatar.
- E. Narantuya, B.Otgonbayar, Study on ICT indicators, MMT2019, pages 112-115, 2019 Ulaanbaatar.
- H.Мөнхгэрэл, Б.Отгонбаяр, Remote monitoring of system performance using GPRS and navigation receivers, MMT2019, pages 146-151, 2019, Ulaanbaatar.

- Batzorig B, Otgonbayar B, B.Budjav, Estimation of earthquake probability in underground radio communication system, Proceeding, №17/244, 2018 он №3(32) pages 130-136.
- Batzorig B, Otgonbayar B, Estimation on the Susceptibility and risk of seismic activity to the radio communication system in underground mining, 148-152, Khureltogoot 2018, DOI:10.12691/ajmm-4-1-6 Ulaanbaatar.
- Batzorig B, Otgonbayar B, Zagarzusem. K, Experimental measurements and antenna isolation for TETRA communication system in underground mining and decline, pp87-93, Conference proceedings, European test telemetry conference, 2018 July, Nuremberg, Germany.
- Batzorig B, Otgonbayar B,, A study of Mining Communication System Reliability Model, IFOST-2018, 5/31/2018, Harbin.
- Otgonbayar B Batzorig B, Reliability modeling in communication systems, MMT-2018,5/4/2018,131-133, Ulaanbaatar.
- B.Otgonbayar, Erdenebayar L,... Some feasibility studies to improve the efficiency in LTE network services, MMT-2018,5/4/2018,94-102, Ulaanbaatar.

- B.Otgonbayar, G.Sarangerel, A study of some issues of cellular quality management, хуудас 74-79, Proceeding of Research conference "Present and future of communication and information technology-2017", Ulaanbaatar, 2017. ISBN 978-99973-941-8-7.
- B.Otgonbayar, O.Tsend, Interference cancellation method in LTE network, , pages 216-221, Proceedings of the "Current and future of communication and information technology-2017" scientific conference, Ulaanbaatar, 2017. ISBN 978-99973-941-8-7.
- G.Khishigjargal, Erdenebayar L, B.Otgonbayar, Young Il Kim, Efficient Dynamic Algorithms for GTS Allocation of Wireless Sensor Network in Rail Communications, Proceeding of IFOST-2017, Ulsan, Korea. 2017.
- G.Khishigjargal, O.Buyankhishig, B.Otgonbayar, Possibility of Cellular IoT based on LTE networks, Proceeding of IFOST-2017, Ulsan, Korea. 2017.

# 2016 он

- B.Otgonbayar, Erdenebayar L, Buyankhishig U, Tuyatsetseg B, Internet of Things (IoT):
   Possibility of IoT infrastructure design for Public Safety Network, MUST. -2016,
   Ulaanbaatar.
- Б.Отгонбаяр, Д.Эрдэнэтуяа, A feasibility study of a wireless sensor network-based train monitoring, Conference "Our role in the development of the information and communication sector -2016", pages 49-53, Ulaanbaatar, 2016.
- B.Otgonbayar, Erdenebayar L, Survey on QoS Management of Resource Utilization in LTE and The IoT M2M Environment, 6th MUSTAK International Conference-2015, Ulaanbaatar, Mongolia, August 22-27, 2016.
- G.Khishigjargal, B.Otgonbayar, Erdenetuya D, .. Галт тэрэгний удирдлагын утасгүй мэдрэгч сүлжээ, үүрэн сүлжээ хоорондын харилцан ажиллагааны судалгаа, МТЗ, 2016 оны 6сар.
- B.Otgonbayar, D.Erdenetuya, G.Khishigjargal, presentation on Higher reliability IWF between WSN and Cellular 3GPP/LTE in Railway monitoring, ETRI, Korea, Aug 2016.
- B.Otgonbayar, G. Dugarchuluun, Метод передачи информации учебного процесса, Региональная научно-практическая конференция Потенциал развития инфокоммуниционной отрасли Байкальского региона, Улан-Удэ, Россия, 2016.
- Uranchimeg T, Bumduuren P, Khishigjargal G, Otgonbayar B, Erdenetuya D, Efficient network topology for monitoring the freight train, ICIED 2016, International Conference on Innovation and Entrepreneurship Development, Scientific journal, №01(001), pp293-297.

#### 2015 он

- B. Tuyatsetseg, B. Otgonbayar, J.Erdenebayar, U.Buyankhishig, Internet of Things: Possibility of IoT Design for Public Safety Network, in Proceeding MUSTAK 2015, Ulaanbaatar, Mongolia, 2015.
- Tuyatsetseg B, B.Otgonbayar, O.Bat-Enkh, Aloha Based Resource Allocation Scheme to Efficient Call Holding Times in Public Safety Network. American Journal of Networks and Communications. Special Issue: Traffic and Performance Engineering for Networks. Vol. 5, No. 1-1, -2015, pp. 1-5.
- O.Bat-Enkh, B.Otgonbayar, B.Tuyatsetseg, Ts.Baatarkhuu, Optimization Algorithm of Resource Allocation IEEE802.16m for Mobile WiMAX, American Journal of Networks and Communications. Special Issue:Traffic and Performance Engineering for Networks. Vol. 5, No. 1-1, -2015, pp. 14-19.
- B.Otgonbayar, B.Tuyatsetseg, A new way on Public Safety Network performance evaluation: KPIS-QoS-GoS approach, American Journal of Networks and Communications, -2015.
- B.Otgonbayar, B.Tuyatsetseg,, Analysis on Variability and Uncertainty in Network Traffic Estimation: An Advanced Model Using Mixture of Lognormal Distribution, American Journal of Networks and Communications, -2015.
- B.Otgonbayar, B.Tuyatsetseg, Integrated Rapid Management Network and Information Technology Communication Technology Innovation Solutions, "Journal of Science, Technology and Innovation, 2015.
- B.Otgonbayar, G.Dugarchuluun, A Study of Disaster Mobile Network Design, ICACT, 2015.
- U.Buyankhishig, Б.Отгонбаяр, P.Uuganbayar, To determine the effects of cellular base station radiation on the human body, Our role in the development of the information and communications sector 2015, pages 222-226, Ulaanbaatar.
- Bat-Enkh O, B.Otgonbayar, Baatarkhuu T, Novel algorithm of resource allocation in LTE, International advanced communication technology ICACT, -2015.
- B.Tuyatsetseg, B.Otgonbayar Integrated Performance Evaluation Approach based on an Advanced traffic modeling by traffic zones: A case study in Public safety network, 2015

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IEEE 17th International conference on high Performance computing (HPCC), 2015 IEEE 7th international symposium on Cyberspace Safety and Security (CSS), and 2015 IEEE 12th International conference on Embedded software and systems (ICESS)

#### 2014

https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=otgo nbayar%20bataaB.Otgonbayar, L.Erdenebayar, P.Uuganbayar, G.Khishigjargal, ICS Algorithm Implementation in 3GPP/LTE, 7th International conference, Ubi-Media computing &workshops, -2014. <a href="https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=otgonbayar%20bataa">https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=otgonbayar%20bataa</a>

#### 2013

- R.Bayarmaa, B.Otgonbayar, Simulation results of fleet trucking system via multiplebeam satellite, MUSTAK Proceedings 2013, page 55. Korea.
- B.Otgonbayar, L.Erdenebayar, U.Buyankhishig, Interference Cancellation Algorithm with Pilot in 3GPP/LTE, pages 86-89, ICCST 2013.
- B.Otgonbayar, B.Tuyatsetseg, On Network Traffic Modeling Framework, a case study with Public Safety Network, BEST paper award, Proc ICCST 2013 international conference, Darkhan, Mongolia, pp. 58-61, 2013.
- B.Otgonbayar, L.Erdenebayar, P.Uuganbayar, Young-il Kim, G.Khishigjargal, Interference Cancellation Algorithm for 2x2 MIMO System without Pilot in LTE, WiCom 2013, IEEE Scientific Research Vol 5, N3B. 2013,
- B.Tuyatsetseg, B.Otgonbayar, Incoming Traffic Modeling for IP enabled Public Safety Network, The 15th Asia Pacific Network Operations, and Management Symposium, IEEE indexed paper, Japan, -2013.
- B.Otgonbayar, O.Tulga, U.Buyankhishig, LTE spatial channel model for use in systemlevel simulation, Strategic technology IFOST 2013 International Forum, Volume 2, 2013, pp149-153.
- B.Tuyatsetseg, B.Otgonbayar, Modeling Call Holding Times of Public Safety Network, International Journal on Computational Science & Applications (IJCSA), Australia, vol. 3, no. 3, -2013, pp 1-19.
- R.Bayarmaa, B.Otgonbayar, Sudhir Agrawal, Design and simulation of fleet tracking system via satellite for multi-beam operation, book in English, ISBN-10: 3659311359, ISBN-13: 978-3659311352, Lap Lambert, January 2013, 84 p,
- B.Otgonbayar, The Development of Mobile IP TV core technology, presentation, UB, MUST 2013.
- B.Tuyatsetseg, B.Otgonbayar, A new model to Efficient Resource allocation in Public Safety network, 2013.

- B.Otgonbayar, R.Bayarmaa, Some research results of fleet tracking system via Satellite,
   APSCO Fourth International symposium, -2012, x39
- B.Otgonbayar, Bat-Enkh.O, G.Khishigjargal, The Analysis of Two Dimensional Resource Allocation Procedures for IEEE802.16m of Mobile WiMax System, Software Engineering and Knowledge Engineering, Theory and Practice, Volume 115, Springer -Verlag Berlin Heidelberg, 2012, pp343-350 DOI: https://doi.org/10.1007/978-3-642-25349-2\_46
- B.Otgonbayar, D.Erdenetuya, O.Bat-Enkh, Ch.Oyu, O.Tulga, Young-il Kim, G.Khishigjargal, Novel design of eMBMS based on the femtocell, IEEE 14th International conference on advanced communication technology ICACT 2012 Proceedings; Smart Society Innovation through Mobile Internet, Phoenix Park, Pyeong Chang, Korea (South), 2012. IEEE Catalog Number: CFP12561-CDR. ISBN: 978-89-5519-162-2; ISSN 1738-9445.
- B.Otgonbayar, L.Erdenebayar, B.Sukhbat, N.Chuluunbandi, P.Uuganbayar, Young-il Kim, G.Khishigjargal; Service Control Algorithm of Providing Efficient Video-on-Demand Service using Hybrid Mechanism, IEEE Catalog Number: CFP1253N-PRT. ISBN: 978-1-4577-1412-2.IEEE indexed International Conference on Consumer Electronics, Communications, and Networks (CECNet 2012) Proceedings, Volume 5, Yichang, Hubei, Republic of China, -2012.

https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=otgonbayar%20bataa

- B.Otgonbayar, Ch.Oyu, O.Tulga, L.Erdenebayar, Young-il Kim, G.Khishigjargal. A
  Functional Design of BM-SC to Support Mobile IPTV in LTE Network, IEEE 7th International
  Forum on Strategic Technology (IFOST2012), UB, -2012.
  <a href="https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=otgonbayar%20bataa">https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=otgonbayar%20bataa</a>
- B.Otgonbayar, Ch. Oyu, D.Erdenetuya, "The Study on the Mobile IPTV transfer technology in LTE network and it's some result", A role of ICT in Development of Mongolia-2012, SICT, UB, - 2012.
- B.Otgonbayar, P.Uuganbayar, E.Erdenetuya, eMBMS architecture based on Femtocell, SICT, UB, Mongolia, - 2012.
- B.Otgonbayar, O.Tulga, Some result of Implementation of Mobile IPTV in LTE network, SICT, UB, -2012.
- B.Otgonbayar, Erdenebayar. L, Mobile IPTV Service control algorithm for VoD service, SICT, UB, -2012.
- B.Otgonbayar, Ch. Oyu, L.Erdenebayar, Some results of Mobile IPTV transfer implementation in LTE/3GPP network, Advanced training innovation and Innovation technology, MUST, UB, -2012.
- B.Otgonbayar, O.Tulga, Young-il Kim, G.Khishigjargal, Implementation of E-MBMS design for Mobile IPTV, Proceedings of the International Conference on engineering-2012 (ICE2012), The joint Conference with MUSTAK and KIIT, Korea institute of Information Technology, Mokwon University, Daejeon, Korea, -2012
- Tuyatsetseg.B, Chowdhury.K, Basagni.S, B.Otgonbayar, On the Tail Behavior Analysis of the Accurate Mixture Model, case study with Public Safety Network performance, Science and Technology Capstone-2013 workshop, Washington DC, -2012, USA.
- Б.Отгонбаяр, О.Тулга, Утасгүй өргөн зурвасын сүлжээний хөгжилт, түүний виртуаль орчны загварчлал, Холбоо, мэдээлэл технологийн өнөө ба ирээдүй-2012, УБ, -2012.
- B.Otgonbayar, presentation on A research area and Some Research Results of Wireless Communication Department of SICT, seminar on Technical University Hamburg TUHH and MUST-SICT joint seminar, 2012.
- B.Otgonbayar, R.Bayarmaa, presentation Satellite communication and future trend, Space technology Mongolia-Japan joint forum exhibition Blue Sky, UB, 2012.
- B.Otgonbayar, O.Tulga, Optimization of resource allocation in Mobile WiMAX network, Research Conference "The present and future of communication and information technology -2012", UB.
- B.Otgonbayar, E.Erdenetuya, P. Uuganbayar, A new model of femto-cell-based eMBMS, Research Conference "A role of information technology in the development of Mongolia -2012.
- B.Otgonbayar, O.Batenkh, Young iL Kim, G.Khishigjargal;Ch.Oyu, O.Tulga; "Noval design of eMBMS based on Femtocell" with IEEE indexed paper, The 14th International Conference on Advanced Communication Technology, with IEEE indexed paper

#### 2011

- B.Otgonbayar, O.Batenkh, Young iL Kim, G.Khishigjargal; "The analysis of twodimensional resource allocation procedures for IEEE802.16m of Mobile WiMAX systems" with IEEE indexed paper, ICNVSP 2011organized by IEEE, IITA and ICSS, Thailand, 2011
- B.Otgonbayar, O.Batenkh, Ts.Baatarkhuu; "A Resource Allocation for Mobile IPTV", Proceeding of International Conference on knowledge-based Industry, ICKI2011, July 2011, UB Mongolia, pp35-36.

### 2010

"WiMAX 16m Mutual Information Based effective SINR Mapping" with IEEE indexed paper,
 B.Otgonbayar, U.Buyankhishig, L.Erdenebayar, organized by IEEE, IITA, and ICSS,
 ICCVT2010, Proceeding, Vietnam, Hanoi, 2010.

- "Proportional Fair Scheduling in IEEE 802.16m for Mobile WiMAX networks" with IEEE indexed paper, B.Otgonbayar, O.Tulga, P.Batmunkh, organized by IEEE, IITA, and ICSS, ICCVT2010, Proceeding, Vietnam, Hanoi, December 2010.
- B.Otgonbayar. O.Tulga, N.Chuluunbandi, G.Gantuya, "WiMAX 16m Cell Handover Algorithm", MUSTAK First International Conference proceeding, Oct 2010, Korea.
- B.Otgonbayar, Y.I.Kim, M.H.Bae, "Performance Analysis of Mobile WiMAX MMR system with Vertical Handover", KICS, book N39, page162, 2009, Korea.
- B.Otgonbayar, M.H.Bae, "Effective RS Deployment in Mobile WiMAX MMR"; KICS Book, N39, page 408, Korea, 2009.

# RESEARCH PROJECT: MOBILE AND WIRELESS COMMUNICATIONS

- Ch. Ganbaatar, B. Otgonbayar, G. Khishigjargal, L. Erdenebayar, S. Dalai, The Development of IoT-based intelligent citizen monitoring system in emergencies, Final research report. -2021.
- G.Khishigjargal, B.Otgonbayar, U.Buyankhishig, E.Erdenetuya, D. Erdenetuya, L.Erdenebayar, and others. A Study of radio resource management and sensing network topology for railway sensing network, ETRI, Korea and Mongolian Mongolian Railway State-Owned Company, MUST. Final Research report -2016.
- B.Otgonbayar /project manager/, L.Erdenebayar, U.Buyankhishig,.The Development of ICS cancellation system based on LTE/3GPP, The Research Project is funded by the IT R&D program of Korean Communication Commission (KCC) and Ministry of the knowledge-based economy (MKE) [2010-10035206, The Development of IMT-Advanced Mobile IPTV core technology], Electronics and Telecommunications Research Institute of Korea (ETRI), Final research report, -2013
- B.Otgonbayar, B.Munkhbat, N.Munkhuu,, O.Tulga, L.Tuul, Z.Amgalan, B.Oyuntsetseg, Investment and economic analysis required for the transition to digital television technology, ordered by CRC of Mongolia, -2013
- B.Sukhbat, B.Otgonbayar, G.Demberel, N.Chuluunbandi, B.Zorigtbaatar, N.Munkhuu, O.Tulga, Digital Radio Broadcasting, and Implementation STB, Research report, ITPTA of Mongolia, -2012.
- B.Otgonbayar /project manager/, Young Il Kim, U. Munkhbold, J.Javzansuren, O.Bat-Enkh, N.Chuluunbandi, O.Tulga, Ch. Oyu, D.Erdenetuya, P.Uuganbayar, E.Erdenetuya, B.Purevtseren, L.Erdenebayar, N.Narandelger, Final report on The Development of Mobile IPTV core technology based on LTE/3GPP, The Research Project is funded by the IT R&D program of Korean Communication Commission (KCC) and Ministry of the knowledge-based economy (MKE) [2010-10035206, The Development of IMT-Advanced Mobile IPTV core technology], Electronics and Telecommunications Research Institute of Korea (ETRI) and by Mobicom corporation of Mongolia, -2012, 138p.
- Principal Investigator of Research Project "The Development of Mobile IPTV core technology" second stage, The Research Project is funded by the IT R&D program of Korean Communication Commission (KCC) and Ministry of the knowledge-based economy (MKE) [2010-10035206, The Development of IMT-Advanced Mobile IPTV core technology], Electronics and Telecommunications Research Institute of Korea (ETRI) and by Mobicom corporation of Mongolia. December 2011.
- Principal Investigator of Research Project "The Development of Mobile IPTV core technology" The Research Project is funded by the IT R&D program of Korean Communication Commission (KCC) and Ministry of the knowledge-based economy (MKE) [2010-10035206, The Development of IMT-Advanced Mobile IPTV core technology], Electronics and Telecommunications Research Institute of Korea (ETRI) and by Mobicom corporation of Mongolia. December 2010.
- Local consultant of the project "Technical Audit of Universal Access Projects in Mongolia". The project is funded by The World Bank. 2008-2011.
- Principal Investigator of Research Project "A study on Wireless and Telephone Service based on WiBro system". The Research Project is funded by the Electronics and Telecommunications Research Institute of Korea (ETRI); 2008.

- Local consultant of the project "Technical Audit of Universal Access Projects in Mongolia". The project is funded by The World Bank. 2008.
- Principal Investigator of the Collaborative Research project "Study on WiBro System Deployment Strategy in Mongolia", Collaborative Research project, funded by Electronics and Telecommunication Research Institute (ETRI) of Korea. 01Oct 2006.
- Manager and expert of the project "Study on WiMAX Standard", Dec 2006.
- Project manager of the Research project "Fourth Generations Mobile and Wireless Communications Frequency and Timing Offsets Estimation Optimum Method for OFDM", Research Project, funded by Asia Research Center (ARC) 01April 2004-01April 2005.
- Project expert of Research project "Fourth Generations Mobile and Wireless Communications Frequency and Timing Offsets Estimation", The Research project, supported by The Korean Foundation for Advanced Studies, Korea. Aug 2002- Aug 2003.

### **HONORS AND AWARDS**

# Medal for Merit in Labour

President of Mongolia

# **Leading Worker of Education Sector**

Ministry of Education and Science

## **LANGUAGES**

Mongolian Mongolian (native language)
English | speak and read/write understand books, research sources
Russian | can read, speak and write understand books, research sources.
Korean | read only

# **TECHNICAL SKILLS:**

- Ability to work on Microsoft Windows, Excel, Word,
- PowerPoint, Adobe Photoshop and Vensim, Mathcad and
- Matlab.
- ICDL (International Computer Driving License), 2009

# PROFESSIONAL AND OTHER MEMBERSHIPS

Member, academic council of the SICT

Member, National Board for Ph.D in Information, Communication and Electronics

Member, educational accreditation board

Member, Board of Certified Professional and Consulting Engineers

2004 to present
2012 to present
2012 to present