

# Prof. JALE ÇAKIROĞLU

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-6451-2019

ScopusID: 14009728400

Yoksis Researcher ID: 3620

## Education Information

Doctorate, Indiana University Bloomington, Program Geliştirme Ve Fen Eğitimi, United States Of America 1996 - 2000

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Fen Bilimleri Eğitimi (Dr), Turkey 1990 - 1993

Undergraduate, Middle East Technical University, Faculty of Education, Ortaöğretim Fen Ve Matematik Alanlar Eğitimi Bölümü, Turkey 1985 - 1990

## Foreign Languages

English, B2 Upper Intermediate

## Research Areas

Social Sciences and Humanities, Education, Education in Natural Sciences, Education in Biology

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Education, Mathematics and Science Education, 2012 - Continues

Associate Professor, Middle East Technical University, Faculty of Education, Mathematics and Science Education, 2006 - 2012

Assistant Professor, Middle East Technical University, Faculty of Education, Mathematics and Science Education, 2002 - 2006

Lecturer, Middle East Technical University, Faculty of Education, Mathematics and Science Education, 2001 - 2002

Research Assistant, Middle East Technical University, Faculty of Education, Mathematics and Science Education, 1990 - 2001

## Academic and Administrative Experience

YÖK Denklik Bilim Kurulu Üyeliği, Middle East Technical University, Faculty of Education, Mathematics and Science

Education, 2017 - Continues

Rektörlük Akademik Teşvik Değerlendirme Komisyonu Üyesi, Middle East Technical University, Faculty of Education, Mathematics and Science Education, 2019 - 2020

Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi, Middle East Technical University, Faculty of Education, Mathematics and Science Education, 2018 - 2018

## Courses

Practice Teaching in Elementary Education, Undergraduate, 2018 - 2019

Project in Elementary Science & Mathematics, Undergraduate, 2018 - 2019

School Experience, Undergraduate, 2018 - 2019

## Advising Theses

ÇAKIROĞLU J., Design and implementation of a graduate course for development of technological pedagogical content knowledge, Doctorate, G.ÇETİNKAYA(Student), 2022

ÇAKIROĞLU J., Investigation of science teachers' nature of engineering views, Postgraduate, N.İRDEM(Student), 2022

ÇAKIROĞLU J., The effect of engineering design-based science instruction on 6th-grade students' astronomy understandings and engineer career interests, Postgraduate, P.BAŞPINAR(Student), 2022

YILMAZ TÜZÜN Ö., ÇAKIROĞLU J., The relationship between eighth grade students' nature of science understanding and their informal reasoning on socioscientific issues, Postgraduate, N.FATIMA(Student), 2021

ÇAKIROĞLU J., Investigating science teachers' technological pedagogical content knowledge (TPACK) competencies: A mixed method study, Postgraduate, M.TANRISEVDİ(Student), 2021

Sungur S., Çakiroğlu J., Investigating science teachers' views of the nature of science based on the reconceptualized family resemblance approach to nos, Postgraduate, Z.MERVE(Student), 2021

Çakiroğlu J., Developing seventh grade students' scientific epistemological beliefs, science process skills and lake ecosystem understandings through Lake Eymir Education Program, Postgraduate, M.BÜŞRA(Student), 2019

Çakiroğlu J., Pre-service science teachers' tpack efficacy levels and technology integration quality: Application of tpack-iddirr model, Postgraduate, İ.ATAKAN(Student), 2019

Çakiroğlu J., Investigation of preservice science teachers' nature of science understanding and decision making on socioscientific issue through the fractal model, Doctorate, E.ECE(Student), 2019

Çakiroğlu J., Köseoğlu F., A STUDY ON PROFESSIONAL DEVELOPMENT TOWARD SCIENCE CENTERS: CHANGE IN SCIENCE TEACHERS' AWARENESS ABOUT SCIENCE CENTERS AND WAYS OF CONDUCTING SCIENCE CENTER VISITS, Doctorate, S.TAHANCALIO(Student), 2019

Çakiroğlu J., THE EFFECTS OF ENGINEERING DESIGN BASED INSTRUCTION ON 7TH GRADE STUDENTS' NATURE OF ENGINEERING VIEWS AND ATTITUDES TOWARDS STEM, Postgraduate, B.AYDOĞAN(Student), 2019

ÇAKIROĞLU J., Pre-service science teachers' TPACK efficacy levels and technology integration quality: application of TPACK-IDDIRR model, Postgraduate, İ.Atakan(Student), 2019

ÇAKIROĞLU J., Developing seventh grade students' scientific epistemological beliefs, science process skills and lake ecosystem understandings through Lake Eymir education program, Postgraduate, M.Büşra(Student), 2019

ÇAKIROĞLU J., The Effects of engineering design based instruction on 7th grade students' nature of engineering views and attitudes towards STEM, Postgraduate, B.Aydoğan(Student), 2019

Çakiroğlu J., Öztekin C., Exploring gifted students' science homework self-regulation skills., Postgraduate, N.BERBER(Student), 2019

ÇAKIROĞLU J., Changes in a science teacher's pedagogical practices and beliefs following ABI: onsite ongoing professional support, Postgraduate, F.Nur(Student), 2018

ÇAKIROĞLU J., Changes in a science teacher's pedagogical practices and beliefs following abi: Onsite ongoing professional support, Postgraduate, F.NUR(Student), 2018

ÇAKIROĞLU J., Exploring 6th grade students' scientific epistemological beliefs and metacognitive awareness regarding

achievement level, Doctorate, Y.BOĞAR(Student), 2018

ÇAKIROĞLU J., Examination of topic-specific nature of pedagogical content knowledge: a case of science teacher of gifted students /, Doctorate, B.ÇAYLAK(Student), 2017

ÖZTEKİN C., ÇAKIROĞLU J., Early childhood teachers' science teaching intentions and behaviours: an application of the theory of planned behaviour, Doctorate, G.Özcan(Student), 2016

ÇAKIROĞLU J., Analyzing collective efficacy of preservice science teachers in science methods course, Doctorate, V.ATASOY(Student), 2016

ÖZTEKİN C., ÇAKIROĞLU J., Early childhood teachers' science teaching intentions and behaviours: An application of the theory of planned behaviour, Doctorate, G.ÖZCAN(Student), 2016

ÖZTEKİN C., ÇAKIROĞLU J., Investigating the effects of science writing heuristic approach on eight grade students' achievement, metacognition and epistemological beliefs, Postgraduate, S.TUĞÇE(Student), 2016

ÇAKIROĞLU J., Investigating questioning patterns of teachers through their pedagogical progression in argument-based inquiry classrooms, Postgraduate, B.KILIÇ(Student), 2016

ÇAKIROĞLU J., Middle school students' reasoning patterns and comprehensions about pseudoscientific applications related to crystals, Doctorate, D.METİN(Student), 2015

ÇAKIROĞLU J., The investigation of pedagogical content knowledge of teachers: The case of teaching genetics, Doctorate, M.AYDEMİR(Student), 2014

ÇAKIROĞLU J., ERTEPINAR H., Science teachers' theory and pedagogy of argumentation in science education: design, implementation, and evaluation of a graduate course through educational design research, Doctorate, Y.Özdem(Student), 2014

ÇAKIROĞLU J., Development of pre-service science teachers' nature of science views and nature of science instructional planning within a contextualized explicit reflective approach, Doctorate, K.BİLİCAN(Student), 2014

ÇAKIROĞLU J., Science teachers' theory and pedagogy of argumentation in science education: Design, implementation, and evaluation of a graduate course through educational design research, Doctorate, Y.ÖZDEM(Student), 2014

ÇAKIROĞLU J., Conceptual, structural and epistemic aspects of science teachers' argumentation practices in the context of evolutionary theory, Postgraduate, E.YEŞİLYURT(Student), 2014

ÇAKIROĞLU J., The interrelation between pre-service science teachers' conceptions of teaching and learning, learning approaches and self-efficacy beliefs, Postgraduate, S.SAÇICI(Student), 2013

Olgan R., Çakiroğlu J., Environmental education in early childhood teacher training programs: Perceptions and beliefs of pre-service teachers, Postgraduate, Z.GÜNER(Student), 2013

ÇAKIROĞLU J., Investigation of the relationship between pre-service science teachers' understandings of nature of science and their personal characteristics, Postgraduate, G.ÇETİNKAYA(Student), 2012

ÇAKIROĞLU J., The Effect of using metacognitive strategies embedded in explicit reflective nature of science instruction on the development of pre-service science teachers/, Postgraduate, A.Baraz(Student), 2012

ÇAKIROĞLU J., The effect of using metacognitive strategies embedded in explicit-reflective nature of science instruction on the development of pre-service science teachers' understandings of nature of science, Postgraduate, A.BARAZ(Student), 2012

KONDAKÇI E., ÇAKIROĞLU J., Self-efficacy, learning strategies, task value and gender: predictors of 11th grade biology achievement, Postgraduate, A.Mutlu(Student), 2012

ÇAKIROĞLU J., Science teachers' perceptions of the elementary science and technology curriculum, Postgraduate, E.ECE(Student), 2011

ÇAKIROĞLU J., The influence of argumentation based instruction on sixth grade students' attitudes toward science, conceptual understandings of physical and chemical change topic and argumentativeness, Postgraduate, B.ZÜHAL(Student), 2011

ÖZDEMİR Ö. F., ÇAKIROĞLU J., Relation of cognitive and motivational variables with students' human circulatory system achievement in traditional and learning cycle classrooms, Doctorate, Ö.SADİ(Student), 2010

ÇAKIROĞLU J., Investigating pre-service science teachers' quality of written argumentations about socio-scientific issues in relation to epistemic beliefs and argumentativeness, Postgraduate, E.İŞBİLİR(Student), 2010

GEBAN Ö., ÇAKIROĞLU J., The effect of explicit embedded reflective instruction on nature of science understandings, scientific literacy levels and achievement on cell unit, Doctorate, M.SERDAR(Student), 2010

ÇAKIROĞLU J., An investigation of pre-service elementary science teachers' scientific literacy level and their attitudes

towards science, Postgraduate, Ö.ULUTAŞ(Student), 2009

ÇAKIROĞLU J., The nature of pre-service science teachers' argumentation in inquiry-oriented laboratory context, Postgraduate, Y.ÖZDEM(Student), 2009

ÇAKIROĞLU J., Öğrenme halkası modelinin lise öğrencilerinin nükleik asitler ve protein sentezi konularını anlamalarına, motivasyonlarına ve öğrenme stratejilerine etkisinin incelenmesi, Doctorate, Ö.SAYGIN(Student), 2009

ÇAKIROĞLU J., Exploring representation of nature of science aspects in science textbooks, Postgraduate, Y.YAMAK(Student), 2009

ÇAKIROĞLU J., A Study on the predictors of teachers' sense of efficacy beliefs, Postgraduate, G.GÜR(Student), 2008

ÇAKIROĞLU J., Professional development of preservice biology teachers through reflective thinking, Doctorate, A.SAVRAN(Student), 2008

ÇAKIROĞLU J., A study on the predictors of teachers' sense of efficacy beliefs, Postgraduate, G.Gür(Student), 2008

ÇAKIROĞLU J., ÖZTEKİN C., The effect of 5e learning cycle approach on sixth grade students understanding of cell concept, attitude toward science and scientific epistemological beliefs, Postgraduate, D.KAYNAR(Student), 2007

ÇAKIROĞLU J., ÖZTEKİN C., Scientific epistemological beliefs, perceptions of constructivist learning environment and attitude towards science as determinants of students approaches to learning, Postgraduate, K.ÖZKAL(Student), 2007

ÇAKIROĞLU J., The effect of 5E learning cycle approach on sixth grade students' understanding of cell concept, attitude toward science and scientific epistemological beliefs, Postgraduate, D.Kaynar(Student), 2007

SUNGUR S., ÇAKIROĞLU J., Examining 8th grade students' perception of learning environment of science classrooms in relation to motivational beliefs and attitudes, Postgraduate, N.ARISOY(Student), 2007

ÇAKIROĞLU J., ÖZTEKİN C., Examining middle school students' understanding of the nature of science, Postgraduate, M.ÇELİKDEMİR(Student), 2006

ÇAKIROĞLU J., Students perceptions' of their science teachers' interpersonal behaviour in two countries : Turkey and te Netherlands, Doctorate, S.Telli(Student), 2006

SUNGUR S., ÇAKIROĞLU J., Predicting academic achievement with cognitive and motivational variables, Postgraduate, N.YUMUŞAK(Student), 2006

ÇAKIROĞLU J., ÖZTEKİN C., The effect of gender and reasoning ability on the students' understanding of ecological concepts and attitude towards science, Postgraduate, H.SOYLU(Student), 2006

ÇAKIROĞLU J., Preservice science teachers perception of profession with metaphorical images and reasons of choosing teaching as a profession., Postgraduate, E.Güzel(Student), 2005

ÇAKIROĞLU J., The effects of hands-on activity enriched instruction on sixth grade students' achievement and attitudes towards science, Postgraduate, Ö.TÜRK(Student), 2005

ÇAKIROĞLU J., Improving 8th grade students' understanding of photosynthesis and respiration in plants by using 5E learning cycle and conceptual change text, Postgraduate, S.Balcı(Student), 2005

ÇAKIROĞLU J., ÖZTEKİN C., Improving 8th grade students' understanding of photosynthesis and respiration in plants by using 5E learning cycle and conceptual change text, Postgraduate, S.BALCI(Student), 2005

GEBAN Ö., ÇAKIROĞLU J., Preservice science teachers perception of profession with metaphorical images and reasons of choosing teaching as a profession, Postgraduate, E.GÜZEL(Student), 2005

ÇAKIROĞLU J., Türkiye genelinde ortaöğretim fen branşı öğretmen ve öğrencilerinin bilimin doğası üzerine görüşlerinin araştırılması, Doctorate, N.DOĞAN(Student), 2005

ÇAKIROĞLU J., ÖZTEKİN C., Investigation of the preservice science teachers' views on science technology and society issues, Postgraduate, E.KAHYAOĞLU(Student), 2004

ÇAKIROĞLU J., ÖZTEKİN C., Preservice elementary teachers' science knowledge, attitude toward science teaching and their efficacy beliefs regarding science teaching, Postgraduate, H.SARIKAYA(Student), 2004

ÇAKIROĞLU J., ÖZTEKİN C., Investigation of the preservice science teachers' views on nature of science, Postgraduate, R.ERDOĞAN(Student), 2004

ÇAKIROĞLU J., Eight grade students' perceptions of their science learning environment and teachers' interpersonal behavior, Postgraduate, N.RAKICI(Student), 2004

ÇAKIROĞLU J., Preservice science teacher's efficacy beliefs regarding science teaching and their classroom management beliefs, Postgraduate, A.SAVRAN(Student), 2002

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Science Teachers' Views on the Nature of Science and its Integration into Instruction**  
Demirel Z. M., Sungur S., Çakiroğlu J.  
Science and Education, vol.32, no.5, pp.1401-1433, 2023 (SCI-Expanded)
- II. **Investigation of Preservice Science Teachers' Nature of Science Understanding and Decision Making on Socioscientific Issue through the Fractal Model**  
Adal E. E., ÇAKIROĞLU J.  
SCIENCE & EDUCATION, vol.32, no.2, pp.529-565, 2023 (SCI-Expanded)
- III. **Effectiveness of Argument-Based Inquiry Approach on Grade 8 Students' Science Content Achievement, Metacognition, and Epistemological Beliefs**  
Deprem S. T. T., Çakiroğlu J., Öztekin C., Kingir S.  
INTERNATIONAL JOURNAL OF SCIENCE AND MATHEMATICS EDUCATION, vol.21, no.4, pp.1057-1079, 2023 (SSCI)
- IV. **The Effects of Engineering Design-Based Instruction On 7th Grade Students' Nature of Engineering Views**  
Aydoğan B., ÇAKIROĞLU J.  
JOURNAL OF SCIENCE EDUCATION AND TECHNOLOGY, vol.31, no.1, pp.68-80, 2022 (SCI-Expanded)
- V. **Novice and experienced science teachers' conceptual knowledge of evolutionary theory within the context of micro-and macroevolution**  
Yesilyurt E., Öztekin C., Çakiroğlu J., Deniz H.  
Journal of Biological Education, vol.55, no.2, pp.109-127, 2021 (SCI-Expanded)
- VI. **Perceptions of Eighth Graders Concerning the Aim, Effectiveness, and Scientific Basis of Pseudoscience: the Case of Crystal Healing**  
Metin D., ÇAKIROĞLU J., Leblebicioglu G.  
RESEARCH IN SCIENCE EDUCATION, vol.50, no.1, pp.175-202, 2020 (SSCI)
- VII. **Preservice science teachers' collective efficacy in a science methods course**  
Atasoy V., ÇAKIROĞLU J.  
EDUCATIONAL STUDIES, vol.45, no.3, pp.326-341, 2019 (SSCI)
- VIII. **Learner Characteristics and Understanding Nature of Science Is There an Association?**  
Cetinkaya-Aydin G., ÇAKIROĞLU J.  
SCIENCE & EDUCATION, vol.26, pp.919-951, 2017 (SCI-Expanded)
- IX. **The pedagogy of argumentation in science education: science teachers' instructional practices**  
Yılmaz Y. O., ÇAKIROĞLU J., ERTEPINAR H., ERDURAN S.  
INTERNATIONAL JOURNAL OF SCIENCE EDUCATION, vol.39, no.11, pp.1443-1464, 2017 (SSCI)
- X. **The Effect of Explicit-Embedded-Reflective Instruction on Scientific Literacy**  
Koksal M., ÇAKIROĞLU J., GEBAN Ö.  
CROATIAN JOURNAL OF EDUCATION-HRVATSKI CASOPIS ZA ODGOJ I OBRAZOVANJE, vol.18, no.2, pp.351-390, 2016 (SSCI)
- XI. **The Effect of Logical Thinking Ability and Gender on Science Achievements and Attitudes towards Science**  
SADI Ö., ÇAKIROĞLU J.  
CROATIAN JOURNAL OF EDUCATION-HRVATSKI CASOPIS ZA ODGOJ I OBRAZOVANJE, vol.17, pp.97-115, 2015 (SSCI)
- XII. **Pre-Service Science Teachers' Written Argumentation Qualities: From the Perspectives of Socio-Scientific Issues, Epistemic Belief Levels and Online Discussion Environment**  
Isbilir E., ÇAKIROĞLU J., Ertepinar H.  
EURASIA JOURNAL OF MATHEMATICS SCIENCE AND TECHNOLOGY EDUCATION, vol.10, no.5, pp.371-381, 2014 (SSCI)
- XIII. **Relations of Cognitive and Motivational Variables with Students' Human Circulatory System Achievement in Traditional and Learning Cycle Classrooms**  
SADI Ö., ÇAKIROĞLU J.

KURAM VE UYGULAMADA EGITIM BILIMLERI, vol.14, no.5, pp.1997-2012, 2014 (SSCI)

- XIV. **The effect of explicit embedded reflective instruction on nature of science understandings in advanced science students**  
Koksal M. S., Çakıroğlu J., Geban Ö.  
JOURNAL OF BIOLOGICAL EDUCATION, vol.47, pp.208-223, 2013 (SCI-Expanded)
- XV. **The Nature of Pre-service Science Teachers' Argumentation in Inquiry-oriented Laboratory Context**  
Ozdem Y., ERTEPINAR H., ÇAKIROĞLU J., Erduran S.  
INTERNATIONAL JOURNAL OF SCIENCE EDUCATION, vol.35, no.15, pp.2559-2586, 2013 (SSCI)
- XVI. **WHAT NOS TEACHING PRACTICES TELL US: A CASE OF TWO SCIENCE TEACHERS**  
DOĞAN N., ÇAKIROĞLU J., BİLİCAN K., Cavus S.  
JOURNAL OF BALTIC SCIENCE EDUCATION, vol.12, no.4, pp.424-439, 2013 (SSCI)
- XVII. **Investigating predictors of sense of efficacy beliefs of classroom science and mathematics teachers**  
GÜR G., ÇAKIROĞLU J., ÇAPA AYDIN Y.  
Egitim Ve Bilim-Education And Science, vol.37, pp.68-76, 2012 (SSCI)
- XVIII. **EFFECTS OF HANDS-ON ACTIVITY ENRICHED INSTRUCTION ON STUDENTS' ACHIEVEMENT AND ATTITUDES TOWARDS SCIENCE**  
SADI Ö., ÇAKIROĞLU J.  
JOURNAL OF BALTIC SCIENCE EDUCATION, vol.10, no.2, pp.87-97, 2011 (SSCI)
- XIX. **AN INVESTIGATION OF ELEMENTARY STUDENTS' SCIENTIFIC LITERACY LEVELS**  
Ozdem Y., ÇAVAŞ P., ÇAVAŞ B., ÇAKIROĞLU J., Ertepinar H.  
JOURNAL OF BALTIC SCIENCE EDUCATION, vol.9, no.1, pp.6-19, 2010 (SSCI)
- XX. **The importance of teacher-student interpersonal relationships for Turkish students' attitudes towards science**  
Telli S., den Brok P., ÇAKIROĞLU J.  
RESEARCH IN SCIENCE & TECHNOLOGICAL EDUCATION, vol.28, no.3, pp.261-276, 2010 (SSCI)
- XXI. **DEVELOPMENT OF NATURE OF SCIENCE SCALE (NSS) FOR ADVANCED SCIENCE STUDENTS**  
Koksal M. S., ÇAKIROĞLU J.  
JOURNAL OF BALTIC SCIENCE EDUCATION, vol.9, no.2, pp.87-98, 2010 (SSCI)
- XXII. **Interpersonal relationship of high schools' teachers and teachers' profile Lise öğretmenlerinin kişilerarasi davranışlari ve öğretmen profilleri**  
Telli S., ÇAKIROĞLU J., Den Brok P.  
Hacettepe Egitim Dergisi, no.36, pp.260-270, 2009 (SSCI)
- XXIII. **Investigating 8(th) Grade Students' Perceptions of Constructivist Science Learning Environment**  
Ozkal K., Öztekin C., Çakıroğlu J.  
EGITIM VE BILIM-EDUCATION AND SCIENCE, vol.34, pp.38-46, 2009 (SSCI)
- XXIV. **Assessing pre-service teachers' environmental literacy in Turkey as a mean to develop teacher education programs**  
Tuncer G., Tekkaya C., SUNGUR S., ÇAKIROĞLU J., Ertepinar H., Kaplowitz M.  
INTERNATIONAL JOURNAL OF EDUCATIONAL DEVELOPMENT, vol.29, no.4, pp.426-436, 2009 (SSCI)
- XXV. **Effectiveness of 5E Learning Cycle Instruction on Students Achievement in Cell Concept and Scientific Epistemological Beliefs**  
Kaynar D., Öztekin C., Çakıroğlu J.  
Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, vol.37, pp.96-105, 2009 (SSCI)
- XXVI. **A conceptual model of relationships among constructivist learning environment perceptions, epistemological beliefs, and learning approaches**  
Özkal K., Tekkaya C., Çakıroğlu J., Sungur S.  
LEARNING AND INDIVIDUAL DIFFERENCES, vol.19, pp.71-79, 2009 (SSCI)
- XXVII. **Teachers' and Students' Perceptions of the Ideal Teacher**  
Telli S., den Brok P., ÇAKIROĞLU J.  
EGITIM VE BILIM-EDUCATION AND SCIENCE, vol.33, no.149, pp.118-129, 2008 (SSCI)
- XXVIII. **Turkish preservice science teachers' efficacy beliefs regarding science teaching and their beliefs**

### **about classroom management**

Gencer A. S., Cakiroglu J.

TEACHING AND TEACHER EDUCATION, vol.23, no.5, pp.664-675, 2007 (SSCI)

### **XXIX. Turkish pre-service science teachers' views on Science-Technology-Society issues**

Yalvac B., Tekkaya C., Cakiroglu J., Kahyaoglu E.

INTERNATIONAL JOURNAL OF SCIENCE EDUCATION, vol.29, pp.331-348, 2007 (SSCI)

### **XXX. Engagement exploration, explanation, extension, and, evaluation (5E) learning cycle and conceptual change text as learning tools**

Balci S., Cakiroglu J., Tekkaya C.

BIOCHEMISTRY AND MOLECULAR BIOLOGY EDUCATION, vol.34, pp.199-203, 2006 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **The Effect of Engineering Design-Based Science Instruction on 6th-Grade Students' Astronomy Understandings**  
Başpinar P., Çakiroğlu J., Karahan E.  
Science Insights Education Frontiers, vol.24, no.1, pp.3835-3857, 2024 (Peer-Reviewed Journal)
- II. **ENGINEERING DESIGN-BASED ACTIVITY FOR MIDDLE SCHOOL STUDENTS: THERMAL INSULATION**  
Guler Nalbantoglu F., Cakiroglu J., YILMAZ TÜZÜN Ö.  
Araştırma Temelli Etkinlik Dergisi, vol.13, no.1, pp.29-53, 2023 (Peer-Reviewed Journal)
- III. **A Study on Examining Relationship between Pre-Service Teachers' Collective Efficacy and Science Teaching Efficacy Beliefs**  
Atasoy V., ÇAKIROĞLU J.  
HACETTEPE UNIVERSİTESİ EGİTİM FAKÜLTESİ DERGİSİ-HACETTEPE UNIVERSITY JOURNAL OF EDUCATION, vol.35, no.2, pp.466-479, 2020 (ESCI)
- IV. **Beliefs about integration of environmental education into the early years: scale development**  
Güner Alpaslan Z., Olgan R., Çakiroğlu J.  
Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, vol.18, pp.880-907, 2017 (Peer-Reviewed Journal)
- V. **How contextualized learning settings enhance meaningful nature of science understanding**  
BİLİCAN K., ÇAKIROĞLU J., ÖZTEKİN C.  
Science Education International, vol.27, pp.463-487, 2015 (Peer-Reviewed Journal)
- VI. **Turkish pre service elementary science teachers scientific literacy level and attitudes toward science**  
ÇAVAŞ P., ÖZDEM YILMAZ Y., ÇAKIROĞLU J., ÇAVAŞ B., ERTEPİNAR H.  
Science Education International, vol.24, pp.383-401, 2013 (Peer-Reviewed Journal)
- VII. **Effects of 5E learning cycle on students' human circulatory system achievement**  
Sadi Ö., ÇAKIROĞLU J.  
Journal of Applied Biological Sciences, vol.4, no.3, pp.63-67, 2010 (Scopus)
- VIII. **Elementary Students' Scientific Epistemological Beliefs in Relation to Socio-Economic Status and Gender**  
Özkal K., Öztekin C., Sungur S., Çakiroğlu J., Çakiroğlu E.  
JOURNAL OF SCIENCE TEACHER EDUCATION, vol.21, no.7, pp.873-885, 2010 (ESCI)
- IX. **Learning Environment Profiles of Turkish Secondary Biology Classrooms**  
Den Brok P., Telli S., Çakiroğlu J., Tekkaya C., Taconis R.  
Learning Environment Research, vol.13, pp.187-204, 2010 (Peer-Reviewed Journal)
- X. **Influence of in-service teacher education program on science teachers' views of nature of science**  
ÇAKIROĞLU J., Dogan N., Bilican K., Cavus S., Arslan O.  
International Journal of Learning, vol.16, no.10, pp.597-606, 2009 (Scopus)
- XI. **Teacher profile in science classes Liselerde fen siniflarında öğretmen profilleri**  
Telli S., den Brok P., ÇAKIROĞLU J.  
Milli Eğitim, no.179, pp.113-123, 2008 (Scopus)

- XII. **Students Perceptions of Science Teachers Interpersonal Behaviour in Secondary Schools Development of a Turkish Version of the Questionnaire on Teacher Interaction**  
Telli S., Den Brok P., Çakıroğlu J.  
Learning Environment Research, vol.10, pp.115-129, 2007 (Peer-Reviewed Journal)
- XIII. **Turkish high school students biology achievement in relation to academic self regulation**  
Yumuşak N., Sungur S., Çakıroğlu J.  
Educational Research and Evaluation, vol.13, pp.53-69, 2007 (Peer-Reviewed Journal)
- XIV. **Lise Öğrencilerinin Bilim ve Bilim İnsanı Hakkındaki Görüşleri**  
BORA DOĞAN N., ARSLAN O., ÇAKIROĞLU J.  
Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, vol.31, pp.32-44, 2006 (Peer-Reviewed Journal)
- XV. **Pre service Teacher Self efficacy Beliefs Regarding Science Teaching A Comparison of Pre service Teachers in Turkey and the USA**  
Çakıroğlu J., Çakıroğlu E., Boone W.  
Science Educator, vol.14, pp.31-40, 2005 (Peer-Reviewed Journal)
- XVI. **Ninth Grade Students Understanding of the Nature of Scientific Knowledge**  
KILIÇ K., SUNGUR S., ÇAKIROĞLU J., TEKKAYA C.  
Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, vol.28, pp.127-133, 2005 (Peer-Reviewed Journal)
- XVII. **The Development and Validation of a Turkish Version of Teachers Sense of Efficacy Scale**  
Çapa Aydın Y., Çakıroğlu J., Sarıkaya H.  
Eğitim ve Bilim, vol.30, pp.74-81, 2005 (Peer-Reviewed Journal)
- XVIII. **Self Efficacy Attitude and Science Knowledge**  
Sarıkaya H., Çakıroğlu J., Öztekin C.  
Academic Exchange Quarterly, vol.9, no.4, pp.38-42, 2005 (Peer-Reviewed Journal)
- XIX. **Turkish Preservice Science Teachers Understanding of Science and Their Confidence in Teaching it**  
TEKKAYA C., ÇAKIROĞLU J., ÖZKAN Ö.  
Journal of Education for Teaching: International Research and Pedagogy, 2004 (Peer-Reviewed Journal)
- XX. **Reflections on Teacher Education in Turkey**  
Çakıroğlu E., Çakıroğlu J.  
Journal of European Teacher Education, vol.26, pp.253-265, 2003 (Scopus)
- XXI. **Preservice Elementary Teachers Self efficacy Beliefs and Their Conceptions of Photosynthesis and Inheritance**  
ÇAKIROĞLU J., BOONE W.  
Journal of Elementary Science Education, vol.14, pp.1-14, 2002 (Peer-Reviewed Journal)
- XXII. **Öğretimde bilgisayar kullanımına ilişkin öğretmen görüşleri**  
ÇAĞILTAY K., ÇAKIROĞLU J., ÇAĞILTAY N., ÇAKIROĞLU E.  
Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, vol.7, pp.8, 2001 (Scopus)
- XXIII. **Preservice Biology Teachers Perceived Efficacy Beliefs in Teaching Biology**  
SAVRAN GENCER A., ÇAKIROĞLU J.  
Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, vol.21, pp.105-112, 2001 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Fen Öğretiminin Amaçları ve Fen Okuryazarlığı**  
Çakıroğlu J., Güler Nalbantoğlu F.  
in: Fen Öğretimi I, Mustafa Ergun, Editor, Nobel Yayınevi, Ankara, pp.27-45, 2023
- II. **Fen Bilimleri Öğretiminde Teknoloji Kullanımı**  
Çetinkaya Aydın G., Çakıroğlu J.  
in: Fen ve Matematik Eğitiminde Teknolojik Yaklaşımlar, Devrim Akgündüz, Editor, Anı Yayıncılık, Ankara, pp.57-73, 2019
- III. **Analyzing Middle School Students' Perceptions of their Science Classroom in Relation to Attitudes**



## **and Motivation**

Arisoy N., Çakirođlu J., Sungur S., Telli S.

in: Teachers creating context based learning environments in science, B. Fraser & J. Dorman, Editor, SENSE Publishers, Rotterdam, pp.173-190, 2016

### **IV. Bilimin Doğası ve Öğretimi**

DOĞAN N., ÇAKIROĐLU J., BİLİCAN K., ÇAVUŞ GÜNGÖREN S.

Pegem Akademi, 2012

### **V. Science teaching efficacy beliefs**

Çakirođlu J., Çapa Aydın Y., Woolfolk Hoy A.

in: Second International Handbook of Science Education, B.J. Fraser, K.G. Tobin & McRobbie, C. J., Editor, Springer, London/Berlin, New York, pp.449-462, 2012

### **VI. Turkish Secondary Education Students' Perceptions of Their Classroom Learning Environment and Their Attitude Towards Biology**

Telli S., Çakirođlu J., Den Brok P.

in: Contemporary Approaches to Research on Learning Environments: World Views, Darrell Fisher, Myint Swe Khine, Editor, World Scientific Publishing, Singapore, pp.517-542, 2006

## **Refereed Congress / Symposium Publications in Proceedings**

### **I. Mühendislik Tasarımı Odaklı Eğitimin Fen Bilimleri Öğretmen Adaylarının Mühendisliğin Doğası Görüşlerine Etkisi**

Aydoğan B., Çakirođlu J., Karahan E.

Ulusal Fen Bilimleri Ve Matematik Eğitimi Kongresi, Edirne, Turkey, 4 September - 07 October 2024, pp.1-3

### **II. The Discursive Choices of Nature of Science Epistemic Communities**

Akillođlu F. Ç., Sungur S., Çakirođlu J.

THE 15TH CONFERENCE OF THE EUROPEAN SCIENCE EDUCATION RESEARCH ASSOCIATION (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023, pp.304

### **III. Investigation of Science Teachers' Nature of Engineering Views**

Ağrıman İrdem N., Çakirođlu J., Canbazođlu Bilici S.

The 15th Conference of the European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023, pp.497

### **IV. The Impact of a Graduate Course on the Development of Technological Pedagogical Content Knowledge**

Çetinkaya Aydın G., Çakirođlu J.

The 15th Conference of the European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023, pp.549

### **V. Affective Domain and Soft Skills in Science Laboratories: A Systematic Review**

Yavuz M., Çakirođlu J.

The 15th Conference of the European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023, pp.556

### **VI. Investigating the Interplay Between the TPACK and Creativity of Pre-Service Science Teachers**

Durukan A., Çakirođlu J., Aydın Günbatır S.

The 15th Conference of the European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023, pp.325

### **VII. Enhancement of Students' Science Process Skills through Inquiry-Based Instruction**

Yađlı M. B., Çakirođlu J., Bekliođlu M.

The 15th Conference of the European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 October 2023, pp.341-342

### **VIII. Science Teachers' Technological Pedagogical Content Knowledge: A Mixed-Method Study**

Tanrisevdi M., Çakirođlu J., Canbazođlu Bilici S.

European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023, pp.486

- IX. **Investigating the Use of Lesson Study with Preservice Science Teachers**  
GÜLER NALBANTOĞLU F., ÇAKIROĞLU J., YILMAZ TÜZÜN Ö.  
Kongre, Turkey, 8 - 11 June 2023
- X. **Lake Ecosystem through the Students' Eyes: The Impact of a Citizen Science Project on Students' Conceptions**  
Yağlı M. B., Çakıroğlu J., Beklioğlu M.  
ECER2022-The European Conference on Educational Research, Yerevan, Armenia, 22 - 23 August 2022, pp.1
- XI. **The Effect of a Graduate Course on Science Teachers' Self-Efficacy and Perceived Competencies of TPACK**  
Çetinkaya Aydın G., Çakıroğlu J.  
ECER2022-The European Conference on Educational Research, 22 - 23 August 2022, pp.1
- XII. **Development of Pre-Service Science Teachers' PCK for STEM in the context of Lesson Study**  
Güler Nalbantoğlu F., Çakıroğlu J., Yılmaz Tüzün Ö.  
ECER2022-The European Conference on Educational Research, 22 - 23 August 2022, pp.1
- XIII. **Eighth grade students' nature of science understanding**  
Irmak N. F. N., Yılmaz-Tüzün Ö., Çakıroğlu J.  
3rd International Conference on Science, Mathematics, Entrepreneurship and Technology Education , Bursa, Turkey, 30 September - 03 October 2021, pp.43-44
- XIV. **Sekizinci Sınıf Öğrencilerinin Bilimin Doğası Anlayışlarının İncelenmesi**  
Irmak N. F. N., YILMAZ TÜZÜN Ö., ÇAKIROĞLU J.  
3rd International Conference on Science, Mathematics, Entrepreneurship and Technology Education, Turkey, 30 September 2021
- XV. **Investigation of Preservice Science Teacher's Nature of Science Understanding and Decision Making on Socioscientific Issue through the Fractal Model**  
Adal E. E., Çakıroğlu J.  
European Educational Research Association (ECER), Geneve, Switzerland, 2 - 06 September 2021, pp.1-3
- XVI. **The Effects of STEM Activities on 7th Grade Students' Motivational Values Towards Science**  
Aydoğan B., Çakıroğlu J.  
European Educational Research Association (ECER), Geneve, Switzerland, 2 - 06 September 2021, pp.1-3
- XVII. **Development of Technology Integration Quality of Preservice Science Teachers via Science Methods Course enhanced by TPACK-IDDİRR Model**  
Atakan İ., Çakıroğlu J.  
European Educational Research Association (ECER), Geneve, Switzerland, 2 - 06 September 2021, pp.1-3
- XVIII. **Middle School Students' Perceptions of Scientists and Engineers and Their Interest Towards STEM Careers**  
Güler Nalbantoğlu F., Çetinkaya Aydın G., Çakıroğlu J., Öztekin C.  
European Educational Research Association (ECER), Geneve, Switzerland, 2 - 06 September 2021, pp.1-3
- XIX. **Eight Grade Students' Nature of Science Understanding and Their Informal Reasoning on Socioscientific Issues**  
Irmak N. F. N., Yılmaz Tüzün Ö., Çakıroğlu J.  
European Educational Research Association (ECER), Geneve, Switzerland, 2 - 06 September 2021, pp.1-3
- XX. **5E Öğrenme Modelinde Mühendislik Tasarım Süreci Odaklı STEM Uygulamalarının İlkokul ve Ortaokul Öğrencilerinin Mühendislik Tasarım Süreci Becerilerine, Yaratıcılık ve Takım Çalışmasına Etkileri**  
Aydın G., Saka M., Çakıroğlu J.  
VIIIth International Eurasian Educational Research Congress (EJER Congress 2021), Aksaray, Turkey, 7 - 10 July 2021, pp.354-355
- XXI. **5E Öğrenme Modelinde Mühendislik Tasarım Süreci Odaklı STEM Uygulamalarının İlkokul ve Ortaokul Öğrencilerinin Mühendislik Alanları ve Mühendislik Algı Düzeyine Etkileri**  
Aydın G., Saka M., Çakıroğlu J.

VIIIth International Eurasian Educational Research Congress (EJER Congress 2021), Aksaray, Turkey, 7 - 10 July 2021, pp.351-353

- XXII. **Sekizinci Sınıf Öğrencilerinin Üç Farklı Sosyobilimsel Konu Hakkındaki İnfomal Muhakemelerinin İncelenmesi**  
Irmak N. F. N., Yılmaz Tüzün Ö., Çakıroğlu J.  
14. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Burdur, Turkey, 19 - 21 May 2021, pp.185
- XXIII. **Fen Öğretmen Adaylarının Sosyobilimsel Konulardaki Karar Verici Otorite Tercihi**  
Adal E. E., Çakıroğlu J.  
14. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Burdur, Turkey, 19 - 21 May 2021, pp.45
- XXIV. **Fen Bilimleri Öğretmenlerinin Teknopedagojik Eğitim Yeterliklerinin Farklı Değişkenler Açısından İncelenmesi**  
Tanrısevdi M., Çakıroğlu J., Bilici S. C.  
14. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Burdur, Turkey, 19 - 21 May 2021, pp.152
- XXV. **Fen Öğretmen Adaylarının Sosyobilimsel Konulara Yaklaşımı**  
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VIIth International Eurasian Educational Research Congress, Eskişehir, Turkey, 10 - 13 September 2020, pp.315-328
- XXVI. **Changes In A Science Teacher's Pedagogical Practices And Beliefs Following ABI: Onsite Ongoing Professional Support**  
Erdal F. N., Çakıroğlu J.  
The European Conference in Educational Research (ECER) 2019, Hamburg, Germany, 2 - 06 September 2019, pp.1-3
- XXVII. **Research Trends in Informal Science Learning from 2008 to 2017: A Content Analysis**  
Tanrısevdi M., Çakıroğlu J.  
The European Conference in Educatioanl Reserach (ECER) 2019, Hamburg, Germany, 2 - 06 September 2019, pp.1-3
- XXVIII. **Changes in Nature of Engineering Views of 7th Grade Students with Engineering Design-Based Instruction**  
Aydoğan B., Çakıroğlu J.  
The European Conference in Educatioanl Reserach (ECER) 2019, Hamburg, Germany, 2 - 06 September 2019, pp.1-4
- XXIX. **Engineering education among 9-15 years old representing the disadvantaged sample group**  
Aydın G., Saka M., Çakıroğlu J., Ibiş Ercihan E., Ozansak Topçu Y., Saruhan V.  
15th International History, Phlisophy and Science Teaching (IHPST) 2019, Thessaloniki, Greece, 15 - 19 July 2019, pp.2-3
- XXX. **Mühendis Olmaya Adım Adım: Çocuk Evleri Örneklemi**  
Aydın G., Saka M., Çakıroğlu J., Ibiş Ercihan E., Ozansak Topcu Y., Saruhan V., Özok Bulut N., Yörükoğlu Özbay İ., Korkmaz D.  
Uluslararası Fen, Matematik, Girişimcilik ve Teknoloji eğitimi Kongresi, İzmir, Turkey, 12 - 14 April 2019, pp.349-350
- XXXI. **A Study on Informal Science Professional Development: A case study of Science Teacher's Way of Science Teaching in Conjunction with Science Center**  
Tahanchalo S., Çakıroğlu J., Köseoğlu F.  
European Educational Research Association (ECER), Bolzano, Italy, 3 - 07 September 2018, pp.1-6
- XXXII. **PCK Mapping of Three Experienced Science Teachers in Refraction of Light Topic**  
Güler Nalbantoğlu F., Çakıroğlu J.  
European Educational Research Association (ECER), Bolzano, Italy, 3 - 07 September 2018, pp.1-6
- XXXIII. **The Effect of Collective Efficacy on Group Performance regarding Preparing Science Lesson Plans**  
ATASOY V., ÇAKIROĞLU J.  
Internatioanl Congress on Education (ERPA 2018), İstanbul, Turkey, 28 June - 01 July 2018, pp.5-9
- XXXIV. **Investigating the Sources of Collective Efficacy in Group Work of Preservice Science Teachers**

- ATASOY V., ÇAKIROĞLU J.  
International Congress on Education (ERPA 2018), İstanbul, Turkey, 28 June - 01 July 2018, pp.1-4
- XXXV. **Application of Draw an Engineer Test (DAET) for a Better Understanding of Middle School Students' Conceptions of Engineering**  
Ertuğrul G. G., Karakaya A., ÇAKIROĞLU J.  
International Congress on Education, İstanbul, Turkey, 28 June - 01 July 2018, pp.104-117
- XXXVI. **How can we understand the interaction of PCK components of a science teacher?**  
Çaylak B., Çakıroğlu J.  
International Congresses on Education (ERPA 2018), İstanbul, Turkey, 28 June - 01 July 2018, pp.198
- XXXVII. **Differences between planning and practicing process of a science teacher's pedagogical content knowledge. International**  
Çaylak B., Çakıroğlu J.  
International Congresses on Education (ERPA 2018) , İstanbul, Turkey, 28 June - 01 July 2018, pp.198
- XXXVIII. **Collective Efficacy: New Motivational Construct to Improve Science Teaching Efficacy Beliefs**  
Atasoy V., Çakıroğlu J.  
Vth International Eurasian Educational Research Congress (EJER Congress), Antalya, Turkey, 2 - 05 May 2018, pp.771
- XXXIX. **Science Education Research for Citizen Science Classroom-based Activities: A Content Analysis of papers published in 2016**  
Bol F., ÇAKIROĞLU J.  
European Educational Research Association (ECER), Copenhagen, Denmark, 22 - 25 August 2017
- XL. **Pre-Service Science Teachers' Conceptions of STEM Education**  
GÜLER F., ÇAKIROĞLU J., YILMAZ TÜZÜN Ö.  
European Educational Research Association (ECER), Copenhagen, Denmark, 22 - 25 August 2017
- XLI. **Addition of New Constructs in the TPB Model in the Context of Early Childhood Teachers' Science Teaching Behaviour**  
ÖZCAN E G., ÖZTEKİN C., ÇAKIROĞLU J.  
The European Conference on Educational Research, Copenhagen, Denmark, 22 August 2018 - 25 August 2017
- XLII. **Teachers' Conceptions of STEM Education**  
UFUKTEPE E., GÜLER F., ÇAKIROĞLU J.  
European Educational Research Association (ECER), Copenhagen, Denmark, 22 - 25 August 2017
- XLIII. **Enhancing preservice science teachers' SSI teaching self-efficacy beliefs and character and values for global citizenship**  
YILMAZ TÜZÜN Ö., ÖZTÜRK N., ÇAKIROĞLU J.  
ERPA International Congress on Education, Budapest, Hungary, 18 - 21 May 2017, pp.126
- XLIV. **Investigation of pre-service science teachers' perceptions of integrated STEM education**  
ÇAKIROĞLU J., YILMAZ TÜZÜN Ö., ÇETİNKAYA AYDIN G.  
ERPA International Congresses on Education 2017, Budapest, Hungary, 18 - 21 May 2017, pp.125
- XLV. **The effectiveness of a graduate course on science teachers' perceived TPACK competencies and self-efficacy of TPACK**  
ÇETİNKAYA AYDIN G., ÇAKIROĞLU J.  
ERPA International Congresses on Education 2017, Budapest, Hungary, 18 - 21 May 2017, pp.126
- XLVI. **Investigation of interaction PCK components of pre-service science teachers in STEM lesson plans**  
ÇAYLAK B., ÇAKIROĞLU J., YILMAZ TÜZÜN Ö.  
International Conference on Education in Mathematics, Science Technology (ICEMST), İzmir, Turkey, 18 - 21 May 2017, pp.128
- XLVII. **Preservice science teachers SSI teaching self-efficacy beliefs**  
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ERPA International Congress on Education, Budapest, Hungary, 18 - 21 May 2017, pp.127
- XLVIII. **Investigating a science teacher's pedagogical difficulties while teaching 7th grade force and motion unit**

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International Conference on Education in Mathematics, Science Technology (ICEMST), İzmir, Turkey, 18 - 21 May 2017, pp.119

- XLIX. **Theory and pedagogy of argumentation: Science teachers' instructional practices**  
ÖZDEM YILMAZ Y., ÇAKIROĞLU J., ERTEPINAR H.  
NARST Annual Conference, Texas, United States Of America, 22 - 25 April 2017, pp.10
- L. **Design, Implementation and Evaluation of a Graduate Course on Argumentation**  
ÖZDEM YILMAZ Y., ÇAKIROĞLU J., ERTEPINAR H.  
NARST Annual Conference, 22 - 25 April 2017
- LI. **Lisansüstü öğrenim gören fen alanı öğretmenlerinin argümantasyon dersinde geliştirdikleri öğretim stratejileri**  
ÖZDEM YILMAZ Y., ÇAKIROĞLU J., ERTEPINAR H.  
12. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Trabzon, Turkey, 28 - 30 September 2016
- LII. **6 Sınıf öğrencilerin bilimsel epistemolojik inançlarını ve bilişüstü farkındalıklarını belirlemeye yönelik bir çalışma**  
BOĞAR Y., ÇAKIROĞLU J.  
12. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Trabzon, Turkey, 28 - 30 August 2016
- LIII. **Methodological differences between science and pseudoscience The case of crystals from the standpoint of 8th graders**  
Metin D., ÇAKIROĞLU J., LEBLEBİCİOĞLU G.  
European Regional IHPST Conference, Flensburg, Germany, 22 - 25 August 2016
- LIV. **Aim working status and scientific status of crystal healing as pseudoscience from middle school students perspectives**  
Metin D., ÇAKIROĞLU J., LEBLEBİCİOĞLU G.  
NARST Annual International Conference, Baltimore, United States Of America, 14 - 17 April 2016
- LV. **Contextualization How it works on NOS views and NOS teaching of pre service science teachers**  
ÇAKIROĞLU J., BİLİCAN K., Akerson V.  
NARST Annual International Conference, Baltimore, United States Of America, 14 - 17 April 2016
- LVI. **Elementary middle and high school students scientific reasoning skills A content Analysis from 1980 to 2015**  
BOĞAR Y., ÇAKIROĞLU J.  
NARST Annual International Conference, Baltimore, United States Of America, 14 - 17 April 2016
- LVII. **Science teachers instructional practices on the way to argumentation**  
ÖZDEM YILMAZ Y., ÇAKIROĞLU J., ERTEPINAR H.  
NARST Annual International Conference, Baltimore, United States Of America, 14 - 17 April 2016
- LVIII. **A study on collective efficacy among preservice science teachers**  
ATASOY V., ÇAKIROĞLU J.  
NARST Annual International Conference, Baltimore, United States Of America, 14 - 17 April 2016
- LIX. **The importance of teaching and learning nature of science through metacognitive strategies A synthesizing study**  
BOĞAR Y., ÇAKIROĞLU J.  
International Conference on Best Practices and Innovation in Education (INOVED 2015), 26 - 28 October 2015
- LX. **Pedagogical content knowledge of teacher of gifted students in applying science activity**  
ÇAYLAK B., ÇAKIROĞLU J.  
European Educational Research Association (ECER), 7 - 11 September 2015
- LXI. **Interaction among components of pedagogical content knowledge A case of science teacher of gifted students**  
ÇAYLAK B., ÇAKIROĞLU J.  
European Science Education Research Association (ESERA), 31 August - 04 September 2015
- LXII. **Pre service science teachers common mistakes in lesson plans**  
ATASOY V., ÇAKIROĞLU J.

- European Science Education Research Association (ESERA), 31 August - 04 September 2015
- LXIII. **Exploring the Effects of Science Writing Heuristic Approach on 8th Grade Students Metacognition**  
Tucel T., Çakıroğlu J., Öztekin C.  
European Science Education Research Association Conference, Helsinki, Finland, 31 August - 04 September 2015
- LXIV. **Pre service science teachers knowledge attitudes and ethical approaches regarding biotechnology**  
ATEŞ H., ÇAKIROĞLU J.  
European Science Education Research Association (ESERA), 31 August - 04 September 2015
- LXV. **The effect of using metacognitive strategies embedded in explicit reflective NOS instruction**  
AYTUĞBA B., ÇAKIROĞLU J., ÇETİNKAYA AYDIN G.  
ISER 2015 World Conference on Education, 10 - 12 June 2015
- LXVI. **Effect of science methods course on science teaching efficacy beliefs of Turkish preservice science teachers**  
ATASOY V., ÇAKIROĞLU J.  
EJER Congress 2015, 8 - 10 June 2015
- LXVII. **The common strengths and weakness of preservice science teachers in microteaching**  
ATASOY V., ÇAKIROĞLU J.  
International Congress on Education (ERPA 2015), 4 - 07 June 2015
- LXVIII. **Experiences of preservice science teachers regarding group work in science methods course**  
ATASOY V., ÇAKIROĞLU J.  
The International Organization for Science and Technology Education (IOSTE), 24 - 26 April 2015
- LXIX. **Teaching strategies of science teachers for genetics topic**  
AYDEMİR M., ÇAKIROĞLU J., ÖZTEKİN C.  
The International Organization for Science and Technology Education, 24 - 26 April 2015, pp.63-64
- LXX. **Examining the Characteristics of Science Centres in Ankara**  
Kaya M., Çakıroğlu J.  
"The International Organization for Science and Technology Education (IOSTE), İstanbul, Turkey, 23 - 25 April 2015
- LXXI. **Structural epistemic and conceptual aspects of science teachers argumentation in the context of biological Evolution**  
Ezgi Y., Çakıroğlu J., Öztekin C.  
2015 NARST Annual International Conference, Michigan, United States Of America, 11 - 14 April 2015, pp.474
- LXXII. **DESIGNING EXPLICIT REFLECTIVE NATURE OF SCIENCE LESSONS: EXPERIENCES OF PRE-SERVICE SCIENCE TEACHERS**  
Bilican K., Çakıroğlu J., Öztekin C.  
5th International Conference on Education and New Learning Technologies (EDULEARN), Barcelona, Spain, 1 - 03 July 2013, pp.948
- LXXIII. **Early Childhood Teachers' Perceptions and Practices in Integration of Environmental Education into Early Childhood Education.**  
Güner Z., Olgan R., Çakıroğlu J.  
European Conference on Educational Research (ECER), Cadiz, Spain, 17 - 21 September 2012
- LXXIV. **Preservice Teachers' Beliefs about Early Childhood Environmental Education: A Questionnaire Development.**  
Güner Z., Olgan R., Çakıroğlu J.  
European Early Childhood Education Research Association (EECERA), Porto, Portugal, 26 August - 01 September 2012, pp.168
- LXXV. **Relation of cognitive variables with students' human circulatory system achievements in traditional and learning cycle classrooms**  
SADI Ö., ÇAKIROĞLU J.  
4th World Conference on Educational Sciences (WCES), Barcelona, Spain, 2 - 05 February 2012, vol.46, pp.399-403
- LXXVI. **Pre-service science teachers' instructional planning for teaching nature of science: a multiple case**

## **study**

Bilican K., Tekkaya C., ÇAKIROĞLU J.

2nd World Conference on Learning, Teaching and Educational Leadership (WCLTA), İstanbul, Turkey, 28 - 30 October 2011, vol.31, pp.468-472

### **LXXVII. Preschool teachers' perceptions of environmental education.**

Güner Z., Olgan R., Çakiroğlu J.

The World Conference on New Trends in Science Education (WCNTSE), Aydın, Turkey, 19 - 23 September 2011, pp.165

### **LXXVIII. Pre service teachers perceptions about the quality of their teacher education program**

ÇAKIROĞLU E., ÇAPA AYDIN Y., ÇAKIROĞLU J., İŞLER I.

16th International Conference on Learning, Barcelona, Spain, 1 - 04 July 2009

### **LXXIX. Turkish High School Student s Perceptions of Constructivist Learning Environment in Chemistry Classrooms and their Attitudes towards Chemistry**

YILMAZ TÜZÜN Ö., ÇAKIROĞLU J., BOONE W.

National Association for Research in Science Teaching (NARST), 3 - 06 April 2006, pp.294

### **LXXX. Turkish high school student s perceptions of constructivist learning environment in chemistry classrooms and their attitudes toward chemistry**

YILMAZ TÜZÜN Ö., ÇAKIROĞLU J., Boone W. J.

Annual Proceedings of the National Association for Research in Science Teaching (NARST), 3 - 06 April 2006

### **LXXXI. Development and validation of Turkish version of teachers sense of efficacy scale**

ÇAKIROĞLU J., ÇAPA Y., SARIKAYA H.

Annual meeting of the American Educational Research Association (AERA), San Diego, United States Of America, 12 - 16 April 2004

## **Supported Projects**

ÇAKIROĞLU J., GÜLER F., ÇETİNKAYA AYDIN G., ÖZTEKİN C., Project Supported by Higher Education Institutions, Öğrencilerin Bilim İnsanı ve Mühendise Yönelik Algıları ile STEM Mesleklerine yönelik İlgileri, 2018 - 2019

Çakiroğlu J., Sak U., Project Supported by Other Official Institutions, Özel yeteneklilere yönelik öğretim programları geliştirme projesi, 2018 - 2019

BEKLİOĞLU M., TOLUNAY D., YAĞLI M. B., DEMİREL S., AYDEMİR M. O., ÇEVİK R., ÇAKIROĞLU J., AKOĞLU Ö., Project Supported by Higher Education Institutions, "Eymir Gölü Elçileri ile Göl Ekolojisi Açık Ders Malzemesi Oluşturulması, 2017 - 2017

ÇAKIROĞLU J., ÇETİNKAYA AYDIN G., YILMAZ TÜZÜN Ö., Project Supported by Higher Education Institutions, Öğretmen adaylarının FeTeMM eğitimine yönelik eğilimlerini bilişsel ve duyuşsal değişkenler açısından incelemek, 2016 - 2016

YILMAZ TÜZÜN Ö., ÇAKIROĞLU J., Project Supported by Higher Education Institutions, Fen bilgisi öğretmen adaylarının sosyobilimsel konuların öğretimi konusunda öz-yeterlik inançlarının, karakter ve değer algılarının geliştirilmesi, 2016 - 2016

ÇAKIROĞLU J., ÖZTEKİN C., Metin D., Project Supported by Higher Education Institutions, Fen Bilgisi Öğretmen Adaylarının Sözde Bilim Doğası Ve Evrim Teorisine Yönelik Algıları Üzerine Bir Çalışma., 2012 - 2013

## **Activities in Scientific Journals**

EURASIAN JOURNAL OF EDUCATIONAL RESEARCH, Editor, 2017 - Continues

Egitim Ve Bilim-Education And Science, First Editor, 2017 - Continues

## **Memberships / Tasks in Scientific Organizations**

YÖK Denklik Bilim Kurulu Üyeliđi, Member of Science Committee, 2017 - Continues

## Scientific Refereeing

TUBITAK Project, 2237 - Program for Supporting Project Training Activities, Eskisehir Osmangazi University, Turkey, May 2020

JOURNAL OF EDUCATION FOR TEACHING, Journal Indexed in SSCI, March 2020

TUBITAK Project, 1002 - Quick Support Program, Middle East Technical University, Turkey, May 2019

TUBITAK Project, 4004 - Nature Education and Science Schools, Middle East Technical University, Turkey, December 2018

TEACHING AND TEACHER EDUCATION, Journal Indexed in SSCI, July 2018

TUBITAK Project, 1002 - Quick Support Program, Middle East Technical University, Turkey, March 2018

## Tasks In Event Organizations

Erbař A. K., Sungur S., akrođlu J., VIth International Eurasian Educational Research Congress, Scientific Congress, Ankara, Turkey, Haziran 2019

akrođlu J., ERPA International Congresses on Education 2019, Scientific Congress, Sakarya, Turkey, Haziran 2019

akrođlu J., Uluslararası Fen, Matematik, Giriřimcilik ve Teknoloji Eđitimi Kongresi,, Scientific Congress, İzmir, Turkey, Nisan 2019

## Metrics

Publication: 141

Citation (WoS): 482

Citation (Scopus): 856

H-Index (WoS): 13

H-Index (Scopus): 14

## Non Academic Experience

YÜKSEKÖĖRETİM KURULU BAŐKANLIđI

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