

CONTACT INFORMATION Department of Mathematics, Faculty of Arts and Sciences, Office No: AS 325, Eastern Mediterranean University, Famagusta, North Cyprus Via Mersin 10, Turkey *Phone:* +90 392 630 2412

*E-mail:* [neset.turgay@emu.edu.tr](mailto:neset.turgay@emu.edu.tr)

NATIONALITY Turkish  
YEAR OF BIRTH 1982  
MARITAL STATUS Single

RESEARCH INTERESTS Algebraic topology; especially Steenrod algebra (MSC 55S10), Hopf algebras; in particular Leibniz-Hopf algebra, Overlapping shuffle algebra (MSC 57T05), Digital Geometry

EDUCATION **University of Swansea**, Swansea, Wales, UK

Ph.D., Mathematics, February 2013

- Thesis: *Conjugation invariants in word Hopf algebras*
- Supervisor: [Martin Crossley](#)
- Second Supervisor: [Tomasz Brzezinski](#)

**Ege University**, Izmir, Turkey

M.S., Mathematics July 2009

- Thesis: *Calculations in the Steenrod algebra*
- Supervisor: Ismet Karaca

**University of Aberdeen**, Aberdeen, Scotland, UK

Erasmus Programme, Mathematics 2008-2009

- Research subject: *Steenrod algebra*
- Supervisor: [Stephen Theriault](#)

**Ege University**, Izmir, Turkey

B.S., Mathematics June 2006

ACADEMIC TITLES

- Associate professor (Docent) in Mathematics, by Inter-University Council (UAK) of Turkey (Since 6 March 2018)
- Ph.D. (Since 28 February 2013)

EMPLOYMENT

- Part-time lecturer, Eastern Mediterranean University, 2016-Present.

ACADEMIC  
EXPERIENCE

- Part-time lecturer at Eastern Mediterranean University, February 2016 –
- Visitor, Ege University Mathematics Department, 2013-2015.
- Tutor, Swansea, Further Maths Support Programme, Wales Institute of Mathematical and Computational Sciences, 2012.
- Tutor, Swansea Maths Master classes February-March 2012.
- Student Demonstrator, Swansea University, UK, 2009-2013.
- Volunteer tutorial assistant, Introductory to Mathematics, University of Aberdeen, UK, Spring 2008.

ARTICLES  
PUBLISHED IN  
JOURNALS  
COVERED BY SCI  
AND SCI  
EXPANDED,  
INTERNATIONAL

1. N.D.Turgay, Invariants under decomposition of the conjugation in the mod 2 dual Leibniz-Hopf Algebra. *Miskolc Math Notes* ([accepted](#)) (SCI-Expanded)
2. N.D.Turgay, I. Karaca, The Arnón bases in the Steenrod algebra. *Georgian Mathematical Journal* doi:[10.1515/gmj-2018-0076](#) (in press) (SCI-Expanded)
3. N.D.Turgay, An alternative approach to the Adem relations in the mod  $p$  Steenrod algebra, *Comptes rendus de l'Académie bulgare des Sciences* **70(4)**, (2017), 457–466. (SCI-Expanded)
4. N.D.Turgay, S.Kaji, The mod 2 dual Steenrod algebra as a subalgebra of the mod 2 dual Leibniz-Hopf algebra. (2017) *Journal of Homotopy related Structures*, doi:[10.1007/s40062-016-0163-x](#) (SCI-Expanded)
5. N.D.Turgay, An alternative approach to the Adem relations in the mod 2 Steenrod algebra, *Turkish Journal of Mathematics*, **38(5)**, (2014), 924-934. doi:[10.3906/mat-1309-6](#) (SCI-Expanded)
6. M. D. Crossley, N.D.Turgay, Conjugation invariants in the mod 2 dual Leibniz-Hopf algebra, *Communications in Algebra*, **41(9)**, (2013), 3261–3266. doi:[10.1080/00927872.2012.682675](#) (SCI-Expanded)
7. M. D. Crossley, N.D.Turgay, Conjugation Invariants in the Leibniz-Hopf algebra, *Journal of Pure and Applied Algebra*, **217**, (2013), 2247–2254. doi:[10.1016/j.jpaa.2013.03.003](#) (SCI)

ARTICLES  
PUBLISHED IN  
JOURNALS  
COVERED BY  
OTHER INDEXES,  
INTERNATIONAL

1. N.D.Turgay, On the X basis in the Steenrod algebra, *Journal of Linear and Topological Algebra* (accepted) (AMS-MR)
2. N.D.Turgay, A remark on the conjugation in the Steenrod algebra. *Communications of the Korean Mathematical Society*, **30(3)** (2015), 269–276 doi:[10.4134/CKMS.2015.30.3.269](#) (ESCI, SCOPUS, AMS-MR)
3. N.D.Turgay, On the conjugation invariant problem in the mod  $p$  dual Steenrod algebra. *Italian Journal of Pure and Applied Algebra*, **34** (2015), [151–158](#). (ESCI, SCOPUS)
4. N.D.Turgay, A Short Note on the Conjugation in the Leibniz-Hopf Algebra, *Journal of Mathematics and System Science*, **4(1)** (2014) [34-36](#). (EBSCO, Google Scholar, Index Copernicus, etc.)

5. N.D.Turgay, Some notes on the dual Leibniz-Hopf algebra, *Journal of Mathematics and System Science*, **3(11)** (2013), 573–576. (EBSCO, Google Scholar, Index Copernicus, etc.)
6. N.D.Turgay, A note on conjugation invariants in the dual-Leibniz Hopf algebra, *International journal of algebra* 17(7) (2013), 809–815.  
doi:[10.12988/ija.2013.31099](https://doi.org/10.12988/ija.2013.31099) (EBSCO, Google Scholar, ULRICH's Periodicals Directory, etc.)

TALKS AT  
SEMINARS,  
CONFERENCES  
AND  
COLLOQUIUM

1. Some results of conjugation in the mod 2 dual Leibniz-Hopf algebra, contributed talk, [XV. Antalya Algebra Days](#) Izmir, Turkey, 22 - 26 May, 2013 (abstract accepted and available at conference webpage).
2. Conjugation invariants in the Leibniz-Hopf algebra, contributed talk, [University of Cambridge](#), ICMS, 26th British Topology Meeting 2012, CMS, U.K, September 6-8, 2012 (abstract accepted and available at conference webpage).
3. Conjugation invariants in the mod-2 Leibniz-Hopf algebra, contributed talk, [Queen's University Belfast](#), Algebra, Combinatorics, Dynamics and Applications, U.K, August 27-30, 2012 (abstract accepted and available at conference webpage).
4. Conjugation invariants in the Leibniz-Hopf algebra, contributed talk, [University of Copenhagen](#), Young Topologists Meeting, Denmark, July 26, 2012 (abstract accepted and available at conference webpage).
5. Conjugation invariants in the dual Leibniz-Hopf algebra, contributed talk, [University of Edinburgh](#), ICMS, 26th British Topology Meeting, U.K, September 1-3 2011 (abstract accepted and available at conference webpage).
6. Conjugation invariants in the mod- $p$  and Integral Leibniz-Hopf algebra, invited talk, University of Manchester, Departmental Topology Seminar, 5th November 2012.
7. Free conjugation invariants, contributed talk, Gregynog, [Mathematics Colloquium](#), U.K, 2011.
8. Free conjugation invariants, contributed talk, University of Swansea, Departmental seminar, UK, March 29th 2011.
9. Contribution to weekly topology seminar for undergraduate students, coordinated by Prof. Ismet Karaca, Mathematics Department Ege University, 2007-2008.

POSTER  
PRESENTATIONS

- University of Manchester, *Calculations in the Steenrod algebra*, MAGIC Postgraduate Student Conference, U.K, Jan 12-14, 2009.

- PROJECTS
- Scientific Research Project (BAP 08-FEN-003) Ege University, Turkey 2009  
Project Title: Some calculations in the Steenrod algebra  
Director of the Project: Prof. Ismet Karaca
- RESEARCH FELLOWSHIPS, GRANTS AND SCHOLARSHIPS
- Departmental Scholarship, Swansea University, U.K. 2009-2012.
  - Socrates Erasmus Grant, University of Aberdeen 2008-2009.
  - Research project “Some calculations in the Steenrod algebra” financed by Faculty of Science, Ege University, Turkey 2008-2009.
- AWARDS
- Publication Awards (2 times), Eastern Mediterranean University 2017.
  - Departmental Scholarship, Swansea University. 2009-2012.
  - Erasmus Grant, University of Aberdeen. 2008-2009.
- REFEREE WORK
- *Hacettepe Journal of Mathematics & Statistics* (SCI-Expanded) (2019)
  - *Cogent Mathematics & Statistics - Taylor & Francis Online* (ESCI) (2015)
- SERVICES
- Internal M.S. examiner, Eastern Mediterranean University 2016.
- DEPARTMENTAL SERVICES
- Representative instructor in Orientation Days, Eastern Mediterranean University 2016-2017
  - Representative Ph.D. student, Swansea University, UK, 2009-2012.
- LANGUAGES
- Turkish as native language.
  - 2014-YDS (National English Proficiency Exam) Score: 81.25/100
- UNDERGRADUATE COURSES TAUGHT IN TURKISH 2016-2019
- Mate 111-General Mathematics
  - Mate 204-Linear Algebra II
  - Mate 218-Linear Algebra II
  - Mate 306-Topology
  - Mate 319-Analytic Geometry 1
- UNDERGRADUATE COURSES TAUGHT IN ENGLISH 2016-2019
- Math 106-Linear Algebra
  - Math 135-Basic Mathematics for Health Sciences
  - Math 151-Calculus 1
  - Math 152-Calculus 2
  - Math 494-Topology
- COMPUTER EXPERIENCE
- Latex, Mathematica, Maple, Matlab
- COURSES, CONFERENCES AND MEETINGS ATTENDED
- Dynamics, Topology and Computations Bedlowa, Poland June 15-20, 2015.
  - Applied Algebraic Topology Workshop, Castro Urdiales, CIEM Spain, 2014.
  - Mathematical Structures of Computation, Directed topology, France, 2014.
  - TTT86, Sheffield University, UK, 2013.
  - Modern Perspectives in Homotopy Theory: Infinity Categories and Homotopy Type Theory, Swansea University, 10-13 April, 2012.

- Fourth Sheffield Homotopy Miniconference: Homotopy and Geometry of Loop Spaces 20-22 January, 2012.
- YTM, EPFL, Lausanne, Switzerland, June 14 - 18, 2011.
- TTT75, Sheffield University, UK, 2010.
- International Conference on Algebraic and Geometric Topology, Capital Normal University, Beijing, China, 28 June - 2 July, 2010.
- Toric Topology - Malaga Spring School, Malaga University, Spain, 2010.
- ICMS, Generic Skills Courses for First Year Postgraduates in the Mathematical Sciences, Edinburgh University, UK, Spring 2009.
- ICMS, Generic Skills Courses for Mathematics Later Years Postgraduates, Edinburgh University, UK, Autumn 2008.

ADDITIONAL  
EXPERIENCE

- Treasurer of AEGEE "European Students Forum" Abertawe, 2009-2012.
- ACE (Aiming for College Education) day leader, Student ACE day tomorrow with Reaching Winder, Swansea University, 2011-2013.
- Swansea study abroad programme Weihai, China, 2010.