



**UiO** • **Centre for Technology, Innovation and Culture**  
University of Oslo

# ANNUAL REPORT 2019



# TIK Centre for Technology – annual report 2019

---

## Contents

Letter from the Director .....	2
TIK – Facts and figures.....	3
Interdisciplinarity in the Age of Uncertainty – TIK 20 years.....	4
Conference programme 20 <sup>th</sup> March.....	4
Staff – new faces at TIK .....	6
Research .....	7
Research projects at TIK in 2019 .....	8
Education.....	10
Master programmes.....	10
High quality of applicants .....	10
Student satisfaction.....	10
Student magazine: Teknovatøren .....	11
2019 in short.....	11
PhD – doctoral degree.....	11
Disputations.....	11
Candidates.....	12
PhD courses and seminars.....	15
Research communication.....	16
Web .....	16
Blogs .....	16
Social media.....	16
Seminars and workshops at TIK in 2019.....	17
Publications .....	19
Publications reported to the Norwegian Science Index (NVI) in 2019:.....	20

## Letter from the Director

The year 2019 was for the TIK Centre a very important time. Two major events and processes took place, making 2019 a highly unusual and exceptional year for us at the centre.

The first event was TIK's 20<sup>th</sup> anniversary, which was celebrated with a large and successful international conference that took place at Blindern in March 2019. The conference "*Interdisciplinarity in the Age of Uncertainty*" was not only an occasion to celebrate TIK's activities and results during the last two decades, but it also provided us with the opportunity to reflect upon our centre's mission, achievements and challenges ahead.

The second major process that characterized 2019 was not expected and initially took TIK's staff by surprise. Towards the end of 2018, the Faculty leadership took the initiative to propose a major organizational change that would place TIK under the Department of Social Anthropology (instead of continuing to be an independent Centre under the Faculty as it has been until now).

Such initiative was not met favourably by TIK. Both the Centre's Board, its leadership, staff and students actively reacted to it, pointing out that such a proposal was not based on reasonable scientific and administrative/organizational arguments. TIK expressed its reaction vividly and in a constructive manner through internal communication channels at the Faculty, UiO and the Norwegian media interested in University politics.

At the same time, other Departments and units of the Faculty (and elsewhere at UiO) also expressed their reaction to the Faculty leadership's proposal. In the spring 2019, after a long and intensive period, the Faculty Board discussed thoroughly the issue and eventually decided that the proposed organizational change will not be undertaken, and that TIK will continue to have organizational status as an independent research centre placed under the Faculty.

Although the conclusion of this process was in the end favourable for TIK, showing also the centre's cohesiveness and strengthening further its scientific and organizational identity, the costs of this organizational process were substantial. The whole staff, its Board and students were actively engaged in Faculty-related discussions for a prolonged period of time, and this took away significant time and energy that should normally be devoted to carry out and manage research, teaching and administrative activities.



Fulvio Castellacci, Director

## TIK – Facts and figures

The TIK Centre at the University of Oslo was established by the senate (now the University Board) as an independent unit organised under the Faculty of Social Sciences in 1999. This unit was a merge of the former Centre for Technology and Human Values (TMV), the interdisciplinary “European master program in Society, Science and Technology” (ESST) and the *Prosjektforum* (project forum, which is no longer a part of the Centre).

The TIK Centre carries out high quality research, education and research communication in the cross-disciplinary fields of innovation and science and technology studies.

### Overview of TIK:

Scientific publications (2019)	35
Master programmes	2
Courses (Masters and Ph. D. courses)	10
PhD-students (per 31.12.2019)	35
Scientific man years (2018 - numbers from DBH, including Centre Director)	36,40
Administrative man years (2019 - numbers from DBH)	4,05
Total number of man years (2019 - numbers from DBH)	40,45
Budget (2019)	44,5 million NOK
Percent of the budget that is financed by external grants (2019)	72 %
Research projects with external financing (2019)	24

## Interdisciplinarity in the Age of Uncertainty – TIK 20 years

TIK celebrated its 20<sup>th</sup> anniversary in 2019 with an international conference where around 200 staff, students, alumni and stakeholders participated. The conference was held 20<sup>th</sup> March.

TIK considers the conference a success, with some learning points. The research and student activity at TIK was well represented through posters at the conference. 23 posters showed the variety in the centre's activity. As for the conference programme, some participants wished for more integrated perspectives from STS and innovation, and how these research traditions examine the same themes in different ways. Whilst there were few younger researchers that took part in the conference session – something to learn from for future conferences, the student journal Teknovatøren was well represented.

The relevance of TIK's research and education is well illustrated in the fact that the State Secretary Sandra Borsch, Ministry of Education and Research, when absent due to illness visited TIK for a meeting afterwards. Taran Thune informed the State Secretary about TIK's interdisciplinary teaching and cooperation with the business sector. Three of TIK's younger researchers represented their research.

During the rest of 2019, TIK participated at the Arendalsuke (INTRANSIT and Taran Thune in cooperation with UiO:Energy).

### Conference programme 20<sup>th</sup> March

#### *10:00- 10.30 Opening and welcome speeches*

- Fulvio Castellacci (Director, TIK)
- Kjartan Almenning (Political Adviser, KD)

#### *10.30- 11.30 Research and Innovation for Sustainability*

- Keynote address by Johan Schot (Professor, Utrecht University)  
Comments by Marianne Ryghaug (Professor, NTNU)
- Allan Dahl Andersen (Associate Professor, TIK)
- Joint discussion moderated by Olav Wicken (Professor, TIK)

#### *12.15- 13.15 Why do we need interdisciplinary research to address societal challenges?*

- Panel discussion moderated by Magnus Gulbrandsen (Professor, TIK)
- Tanja Storsul (Director, Institute for Social Research)
- Johan Schot (Professor, Utrecht University)
- Johannes Waage Løvhaug (Department Director, NFR)

#### *13.15- 14.15 Technologies and Politics of Life*

- Ingunn Moser, Professor and Rector, VID
- Anders Blok, Associate Professor, University of Copenhagen
- Jessica Mesman, Associate Professor, Maastricht University
- Kristin Asdal, Professor, TIK
- Joint discussion moderated by Susanne Bauer, Professor, TIK

#### *14.45- 15.45 Undisciplined education: Reality-oriented or second rate?*

- Panel discussion moderated by Hilde Reinertsen (Postdoctor, TIK)
- Tone Bjørndal (Project manager, Norsk Klimastiftelse)

- Jarle Hildrum (Senior Research Scientist, Telenor)
- Jessica Mesman (Associate Professor, Maastricht University and ESST)
- Asun Lera St.Clair (Senior Principal Scientist, DNV-GL)
- Daniel Ras-Vidal (Director, Kunnskapsbyen Lillestrøm)
- Helge Jordheim (Professor, IKOS, UiO)

*Closing remarks and opening of the "TIK Fair"*

- Ingjerd Hoëm (Chair of the TIK Board)
- Traran Thune (Professor, TIK) introduces the TIK Fair

*16.00- 18.00 The TIK Fair*

- The TIK Fair is an interactive display of research and educational activities carried out by TIK staff, students and partners. Visitors are free to stop by, learn and discuss with us whilst enjoying complementary refreshments.

## Staff – new faces at TIK

Markus Bugge joined TIK as substitute associate professor from April 2019. TIK welcomed two new PhD candidates in 2019, both employed at TIK: Joar Kvamsås and Frauke Rohden. The complete list of candidates in the programme is listed under “PhD – Doctoral degree” below.

Julia Szulecka joined TIK as an externally funded researcher and head of the project BREAD - Building Responsibility and Developing Innovative Strategies for Tackling Food Waste from 1 November 2019. Tuukka Rainer Reinhold Mäkitie joined TIK as an externally funded researcher from 8 May 2019 till 7. March 2020.

Frode Løvik resigned as Head of Administration at TIK in November 2019. Lene Angelskår substituted Stine Bruland as research adviser during Bruland’s parental leave. Jørgen Bollingmo substituted Lene Angelskår as student advisor. There were also some more short term substitutes in the administration.

## Research

Research at the TIK Centre is organised in two research groups: the Science, Technology and Culture research group and the Innovation Studies research group.

TIK's researchers in the Science, Technology and Culture research group are mainly situated within the multidisciplinary field of Science & Technology Studies (STS) and focuses on the ways in which science and technology are shaped, become institutionalized and become involved in politics. Science and technology are viewed as cultural and material practices that can be fruitfully studied from both historical and contemporary perspectives.

The innovation group focuses on understanding the complex and dynamic relationships between the technological, economic and social factors that contribute to innovation in various firms, sectors, regions and countries. The point of departure for this work is that technological change and learning are important driving forces for societal change.

Both groups are active in international networks and initiatives, including the Peder Saether Centre in Berkeley, EU-SPRI and Nordic STS.

In addition to the two groups, climate and the energy transition is a cross-cutting theme at TIK, encompassing researchers from both groups.

Several researchers at TIK have applied for funding from a magnitude of programs and funding agencies, and predominantly the Research Council of Norway. TIK's role is either as project coordinator or as partner in projects hosted by other institutions. Following national and university strategic decisions, TIK has also applied and participated in EU-funded research through the Horizon 2020 Research Program. In 2019, TIK was involved in three projects funded by the EU.

Five new projects were added to the list of TIK projects in 2019. PATHWAYS is a project funded by the ENERGIX programme of RCN and led by Allan Dahl Andersen. INTRANSIT is an 8-year centre funded by FORINNPOL (RCN) and led by Taran Mari Thune. BREAD - Building Responsibility and Developing Innovative Strategies for Tackling Food Waste is funded by the RCN and led by Julia Szulecka. TIK is a partner in NTRANS - Norwegian Centre for Energy Transition Strategies, project leader at TIK is Allan Dahl Andersen. And finally, a student exchange project funded by DIKU, Bridging Boundaries, led by Susanne Bauer. In addition, TIK is continuing its cooperation with Telenor through the project "Measurement and Management of Innovation".

In addition, RCN granted support for four projects starting in 2020. Value-Threads is a Researcher Project funded by the FRIPRO programme and chaired by Kristin Asdal. The STS group also secured to Researcher Project for Young Talents: "ResBod: Resisting bodies: The politics and practices of the immune system", led by Tone Druglitrø and "Evaluation Optics of the Nation State: The Past, Present and Future of Public Documentation (EVALUNATION)", led by Hilde Reinertsen. The fourth project, The Continued Effects of Nordic Colonialism in Urban Development and Planning (URBTRANS), led by Tone Huse, was applied for from TIK but is being led from University of Tromsø – The Norwegian Arctic University. TIK continues as a partner in this project.



## Research projects at TIK in 2019

<b>PROJECT</b>	<b>PROJECT LEADER</b>	<b>STARTING DATE</b>	<b>FUNDING</b>
ReDig - Responsibility as an Integral Component of Digital Research Practices in Bio- and Nanotechnology	Ana Delgado Aleman	01-mai-2017	RCN – BIOTEK2021
ReNewGrowth – Conditions for growth in renewable energy industries	Jens Hanson	01-aug-2017	RCN - ENERGIX
InfraData - Infrastructuring Internet of Things for public governance	Susanne Bauer	01-apr-2017	RCN - IKTPLUSS via UIO IFI
ResPublica - Responsibility, practices and the public goods across Digital Life	Ana Delgado Aleman	01-okt-2017	RCN – BIOTEK2021 via NTNU
Greenfleet – Greening the Fleet – Sustainability Transitions in the Maritime Shipping Sector	Jens Hanson	01-mar-2017	RCN – ENERGIX via SINTEF
SuSolTech - Research Centre for Sustainable Solar Cell Technology	Olav Wicken	01-jun-2017	RCN – FME via Institutt for Energiteknikk/ UiO:Energi
OSIRIS	Magnus Gulbrandsen	01-mai-2016	RCN – FORINNPOL NAV
TEMPEST	Fulvio Castellacci	01-des-2016	RCN - via TØI
HappyICT - Responsible Innovation and Happiness: A New Approach to the Effects of ICTs	Fulvio Castellacci	01-des-2015	RCN - SAMANSVAR
Measurement and Management of Innovation (Telenor)	Fulvio Castellacci	01-nov-2018	Telenor
ERC StG Little Tools Enacting the Good Economy: Biocapitalization and the little tools of valuation	Kristin Asdal	01-aug-2015	EU Horizon 2020 - European Research Council Starting Grant
InGrid - Integration of Power Transmission Grids - Prospects and Challenges at National and European Levels in advancing the energy transition	Allan Dahl Andersen	01-aug-2015	RCN - ENERGIX
SusValueWaste - Sustainable path creation for innovative value chains for organic waste products	Fulvio Castellacci	01-jun-2015	RCN - BIONÆR - via NIFU

I3U Investigating the Impact of the Innovation Union	Fulvio Castellacci	01-feb-2015	EU Horizon 2020 - via Uni. Maastricht
SIVAC - Supplier Industry and Value Creation	Taran Thune	01-sep-2014	RCN - PETROSAM 2
CenSES - Centre for Sustainable Energy Studies	Olav Wicken	01-feb-2012	RCN - FME - via NTNU
GlobOil	Helge Ryggvik	01-jun-2018	RCN - PETROMAKS2
BioRoBoost	Ana Delgado	01-nov-2018	EU H2020
INTRANSIT	Taran Thune	01-jan-2019	NFR – FORINNPOL
Conflicting Transition Pathways for Deep Decarbonization	Allan Dahl Andersen	01-oct-2019	NFR – ENERGIX
BREAD - Building Responsibility and Developing Innovative Strategies for Tackling Food Waste	Julia Szulecka	01-sept-2019	NFR
NTRANS - Norwegian Centre for Energy Transition Strategies	Allan Dahl Andersen	01-aug-2019	RCN - FME - via NTNU
Bridging Boundaries	Susanne Bauer	01-may-2019	DIKU
Connect	Kristin Asdal	01-dec-2018	RCN – via CICERO

In addition, in 2019 TIK had three PhD candidates through the RCN OFFPHD programme, and two NÆRINGSPHD.

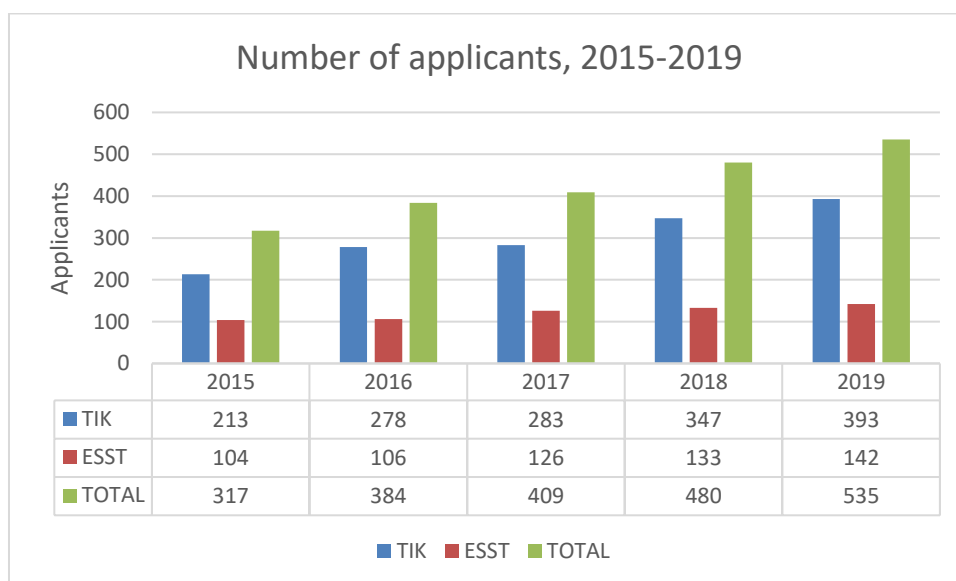
## Education

### Master programmes

TIK offers two programmes at the master level:

- TIK - Technology, Innovation and Knowledge (2 years)
- ESST - Society, Science and Technology in Europe (1,5 years)

30 master students are admitted every year, 20 to the TIK and 10 to the ESST-program. Both programs have experienced a steady rise in applicants during the last five years.



Source: UiO Tableau-studier

### High quality of applicants

Students can apply to a maximum of three UiO programmes any given year, and they must make a priority list. In 2015, around 100 of the applicants had TIK/ESST as their number one priority. In 2017 this number had increased to 141, and in 2019, the TIK and ESST masters had 198 first priority applicants. The number for the TIK programme is particularly good, with more than 5 first priority applicants for each available place.

The grade point average (GPA) of applicants has gradually risen since 2013, and in 2019, the applicants needed a GPA of no less than B in order to be admitted.

Both of these developments are positive and expected to increase the quality of students that will enrol in TIK's Master programmes in the coming years.

### Student satisfaction

Studiebarometeret.no is a web portal made by NOKUT, which measures students' satisfaction with their study programme.

In 2019 the ESST programme received slightly more favourable reviews than the TIK programme, while the last years the opposite has been the case. Students on both programmes are generally happy with their programme. The ESST-students' reviews are most favourable on the indexes for teaching and inspiration. These indexes deal with how interesting and engaging the programme is, as well as how much effort is expected from the students themselves. Both programmes have a rather low rate of answers..

### **Student magazine: Teknovatøren**

Teknovatøren is since 2006 the TIK and ESST students' semi-scientific student magazine. It is partly financed by the TIK Centre.

Editions in 2019:

- #17: Interdisciplinarity in the Age of Uncertainty (Jubilee number for the TIK 20 years)
- #18: The Double-Edged Sword of Technology

### **2019 in short**

- Degrees completed: 15 TIK, 10 ESST.
- A new student exchange programme between TIK and Tomsk State University in Russia began. The programme is funded by DIKU. The first year of the exchange programme saw two students coming to TIK and one student going to Tomsk.

## **PhD - doctoral degree**

TIK's doctoral track is one of the seven tracks of the doctoral programme that is offered by the Faculty of Social Sciences at UiO. TIK's track aims to provide both research training and a broad base of advanced knowledge in theoretical and methodological approaches within science, technology and innovation studies.

Professor Susanne Bauer has been coordinator of TIK's PhD programme track during 2019.

### **Disputations**

There were none disputations in 2019, but 2 candidates handed in their thesis in 2019 for defense in 2020.

## Candidates

TIK welcomed two new candidates during 2019, and had the following candidates enlisted in the program as of December 31<sup>st</sup> 2019.

In total TIK had 35 candidates enrolled in the TIK PhD program:

Candidate	PhD project	Supervisor(s)	Funding
Bianca Cavicchi	Governance of bioenergy innovation systems in the rural areas of Emilia Romagna and Oppland-Hedmark.	Olav Wicken, John Bryden	NILF
Morten Fosaas	Innovation Systems and Innovation Policy: Perspectives and Challenges	Jan Fagerberg og Anna Bergek	TIK - basis
Sveinung Grimsby	How does the Norwegian food industry act during innovation processes? A study on new product failure rate and systematic differences between successful and unsuccessful innovation projects in the food industry.	Magnus Gulbrandsen and Cathrine Finne Kure	Nofima AS
Bård Hobæk	Salmon Sustainabilities	Kristin Asdal	TIK – strategic
Ásdis Jónsdóttir	Climate change, ecology and knowledge in Iceland: An anthropological study.	Tian Sørhaug and Gisli Pálsson	TIK - basis
Bård Lappegård Lahn	Climate governance between global knowledge and national politics.	Kristin Asdal	Cicero
Marie Byskov Lindberg	The politics of power transmission	Allan Dah Andersen	TIK – project: InGrid
Sylvia Lysgård	Hva dreier det seg om? Næringsliv, politikk og praksiser i to norske (miljø)saker.	Göran Sundqvist og Kristin Asdal	TIK - basis
Turid Markussen	Antropologi i nord	John Law	Centre for Gender Research
Tuukka Mäkitie	Function-interactions in innovation processes: the technological innovation system of petroleum industry	Taran Thune	TIK - basis
Tommas Måløy	Valuation in genomic databases: a case study on the Aqua Genome Project	Kristin Asdal	TIK - basis
Helena Nynäs	Valuation of major waterfalls in modern Norway	Sissel Myklebust and Mari Hvattum	NVE

Artur Santoalha	Smart Specialization: Where do European regions stand?	Fulvio Castellacci	TIK - strategic
Henrik Schwabe	ICTs and Subjective Well-Being: Perceived fairness, social mobility and capabilities	Fulvio Castellacci	TIK – project: Happy ICT
Erlend Osland Simensen	Mapping the supplier industry	Taran Thune	TIK – project: SIVAC
Guro Ådnegard Skarstad	New Fish in a New Environment: Challenges to a Comprehensive Management of Fish, Environments and Human Beings.	Kristin Asdal	NILF
Kari-Elisabeth Vambeseth Skogen	The impact of research on policy: an empirical study of the use of scientific knowledge in policymaking in Norway	Taran Thune, Magnus Gulbrandsen, and mentor Geir Arnulf	NFR/KD - offentligPhD
Hege Rudi Standal	Universities as Strategic Actors- University management and the new era of Governance.	Magnus Gulbrandsen og Merle Jacob	TIK - basis
Elisabeth M C Svennevik	Changes towards sustainable mobility: Experiences from car sharing in urban areas.	Olav Wicken, Tom Erik Julsrud (TØI)	TIK – project: TEMPEST (TØI)
Nhat Strøm-Andersen	Towards a sustainable bioeconomy: The role of dynamic interplay between technology, industry and policy - a study of organic waste streams from the Norwegian food industry	Fulvio Castellacci	TIK – project: SusValueWaste
Kasper Rogde Søyland	An Innovative Century? The origins for advanced aluminium prefabrication	Olav Wicken og Finn Ørstavik	HBV
Tina Naomi Talleraas	Unlocking the Black Box of Nuclear Disarmament: A case study of the Norwegian initiative to re-politicize the bomb	Göran Sundqvist	TIK - basis
Irene Øvstebø Tvedten	Science and Corporate Policy –DNV GL as an enabler for a sustainable future"	Kristin Asdal /Susanne Bauer	TIK - basis
Lars Wenaas	Open Access: En endring av forskningspubliseringen med begrenset rekkevidde?	Magnus Gulbrandsen	CERES/NDR - OffentligPhD
Cyriac George	Transition pathways in context: a socio- technical analysis of hydrogen fuel in	Olav Wicken	TØI, via Næringsph.d.-programmet

	the Norwegian transportation sector.		
Gard Neverlien	Public Procurement and Innovation in Helthcare: An analysis of pharmaceutical procurement in Norway, reviewing current rules, regulations and practices, and developing principles and methodology for next generation frameworks.	Fulvio Castellacci/ to biveiledere NOFAS	Nofas AS, via Næringsph.d.-programmet
Kjersti Aalbu	Aligning shipping with the Paris Agreement: Expert knowledge, the IMO, and a decarbonised shipping industry in the making	Susanne Bauer/ to biveildere DNV-GL	DNV GL AS/NFR
Sissel Småland Aasheim	The infrastructure of responsibility	Ana Delgado	NFR - ResPublica
Silje Morsman	Responsible Research and Innovation (RRI) perspectives in the COMPARE project	Kristin Asdal	COMPARE-project
Tércio Pinho Filho	Actors recomposition in the O&G industry: a case study for adaptation and innovation from subsea suppliers	Helge Ryggvik	GlobOil- Project
Eili Skrivervik	Innovation and technology transfer in field-development projects on Norway, Brazil and U.S. GoM	Taran Thune	GlobOil- Project
Alina Kontareva	Salvaging and Rebuilding in the Wreckage: Building an Innovative Ecosystem in Post-Soviet Countries	Fulvio Castellacci/ Biveileder UC Davies	TIK - basis
Jørgen Aarhaug	How can digitalisation and transport innovations contribute to more efficient and sustainable passenger transport in urban agglomerations?	Olav Wicken og Ove Langeland	TØI/NFR
Joar Kvamsås	The impact of research collaboration on innovation in firms and industries	Fulvio Castellacci/ Biveileder SSB	NFR - OSIRIS
Frauke Rohden	Tracing the impact of scientific research in online spaces	Magnus Gulbrandsen/ Biveileder Susanne Bauer	TIK-Strategic (OSIRIS)

## PhD courses and seminars

### TIK9101 Obligatory PhD seminars:

Spring: 7 June 2019 at Tøyen Hovedgård

Autumn: 19 November 2019 at Tøyen Hovedgård

TIK 9021- Science and Technology Studies: 9-13 December 2019.

TIK 9024 Research, Innovation & Impact: 2-6 December 2019

TIKs candidates continue to benefit from TIK being involved in national and international research networks like EU-SPRI, EASST – European Association for the Study of Science and Technology, and the Norwegian Research School on Innovation (NORSI), giving access to a large number of research courses and relevant conferences.



## Research communication

### Web

During 2019, the following research-based news articles were written for TIK's web page.

- «Gode tider for oljen forsinket satsingen på havvind»  
Written in connection to Tuukka Mäkitie's research on the oil industry and sea wind mills. (At TIK-web, 332 visits, 368 page views. The article is still being read with 4 visits the last 60 days).
- «Grønn innovasjon på tvers»  
Written in connection to the opening of the INTRANSIT research centre led by Taran M. Thue. (At TIK-web, 364 visits, 406 page views. The article is still being read with 7 visits the last 60 days).
- “Hva skal til for å bygge opp en større norsk havvindindustri?”  
Written in connection to a report co-written by Jens Hanson and Håkon Endresen Normann on the possibilities for a Norwegian sea wind industry. (At TIK-web, 57 visits, 61 page views. The article is still being read with 4 visits the last 60 days).<sup>1</sup>

In addition to “Research News”, TIK webpages have three headlines that report on TIK researcher's communication activity; “News”, “Publications”, and “TIK i media” (only in Norwegian).

4 shorter news articles/notices were posted online, 24 publications were announced and 6 TIK in media was reported in 2019. The list does not cover all activity at TIK, and different research groups/projects/people seem to favour different types, or “lines” of communication and dissemination. This means that the numbers reflect a bias towards some researchers that get more publicity reported on the web page than others. There is no reason to believe that the visibility on the web page reflect degree of involvement in communication and dissemination.

Our web pages in English are viewed 2 941 times the last 30 days and our web pages in Norwegian are viewed 2 954 times the same period. This means that TIK produce content on the web that is read in both languages. Our employee's profile pages and our section on “Forskning” (in Norwegian) rank high regarding page views.

### Blogs

TIK have two Blogs tied to different research projects that post with different frequency, and with different reach. This form of dissemination is becoming more popular and TIK are aware the need to develop a communication plan for new initiatives.

### Social media

TIK has been on Twitter since 2012 and on Facebook since 2015, where we have published news, events, publications, available positions, TIK Talks, student information etc.

---

<sup>1</sup> Date of report 10.09.2020

Our Facebook page mainly targeted potential applicants for the master and PhD programs, and alumni. In 2019 the page increased its number of followers; from 512 at the start of the year up to around 600 by the end of it.

## Seminars and workshops at TIK in 2019

<b>Date</b>	<b>Speaker</b>	<b>Title</b>
18.12.2019	Marie Byskov Lindberg	Final seminar: Decarbonization pathways and system reconfiguration of the European electricity sector. Policy mixes and market design for transformative change.
5.12.2019	Kristin Asdal and Hilde Reinertsen	TIK Methods lab: Interdisciplinary document analysis
4.12.2019	Julia Szulecka	Kick-off seminar: BREAD
21.11.2019	Frauke Rohden	TIK Methods Lab: From Spreadsheet to Network
24.10.2019	Hélène Mialet, Associate Professor, York University, Canada	TIK Methods Lab: Translating the body and the self through dogs and machines
22.10.2019	Nhat Strøm-Andersen	Final seminar: Transition in the making: How to create value and achieve a sustainable food processing: A case study of Norwegian food industry in the transition towards the bioeconomy.
27.8.2019	Artur Santoalha	Final seminar: Technological diversification in European regions
27.8.2019	Sandro Montesor	Guest lecture: Unlocking the green door of regional development: the role of MNEs in greening local inventive activities
7.-12.7.2019	Susanne Bauer et al.	Co-organizing:  The International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB) Conference 2019  Book of abstracts: <a href="https://ishpssb2019.tekniskmuseum.no/images/pdf/ISHPSSB2019_Book_of_abstracts.pdf">https://ishpssb2019.tekniskmuseum.no/images/pdf/ISHPSSB2019_Book_of_abstracts.pdf</a>

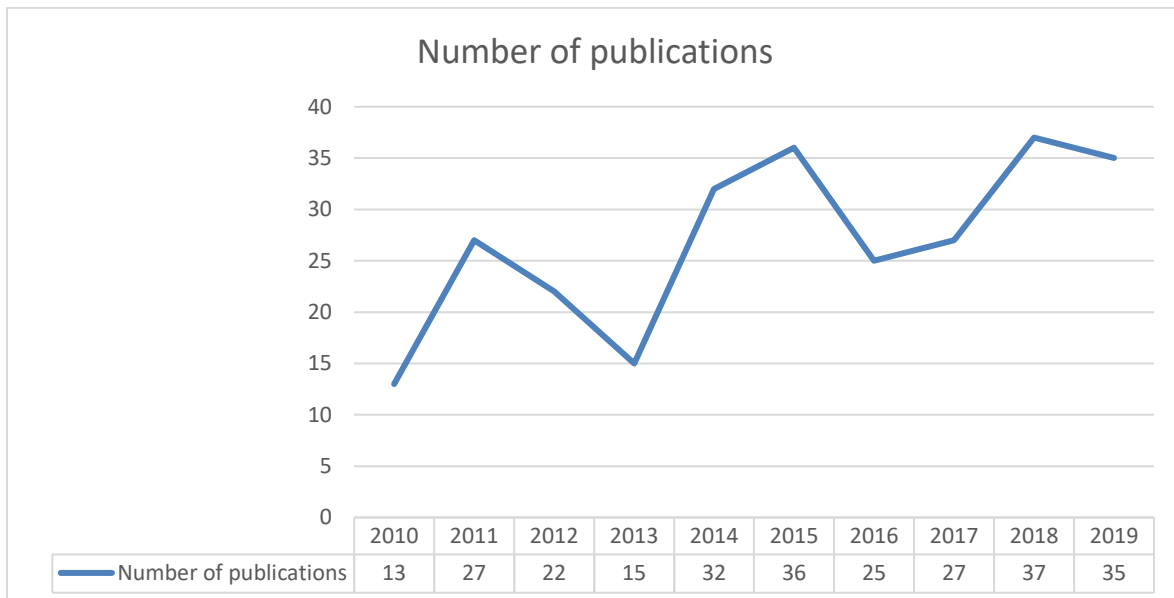
13.6.2021	Fulvio Castellacci et al.	End conference and book launch: SusValueWaste
12.6.2019	Magdalena Stawkowski, Assistant professor, Walker Institute for International Studies, University of South Carolina	Guest lecture: Economic Development of the Soviet-Era Nuclear Test Site in Kazakhstan
10.4.2019	Simen G. Enger	Final seminar: The factors behind participation: Evidence from the European framework programme, Horizon 2020
7.2.2019	Ron Boschma, Professor ,Utrecht University and University of Stavanger	Guest lecture: Technological Diversification and Regional Resilience

TIK researchers are also active in external seminars as key speakers, part of panel discussions and other the list above does not reflect this.

## Publications

2019 has been a very good year for TIK in regard to scientific publications. A total of 35 scientific publications were published and registered in the Cristin database. These were published by both junior and senior researchers in prestigious journals in the fields of innovation studies and STS

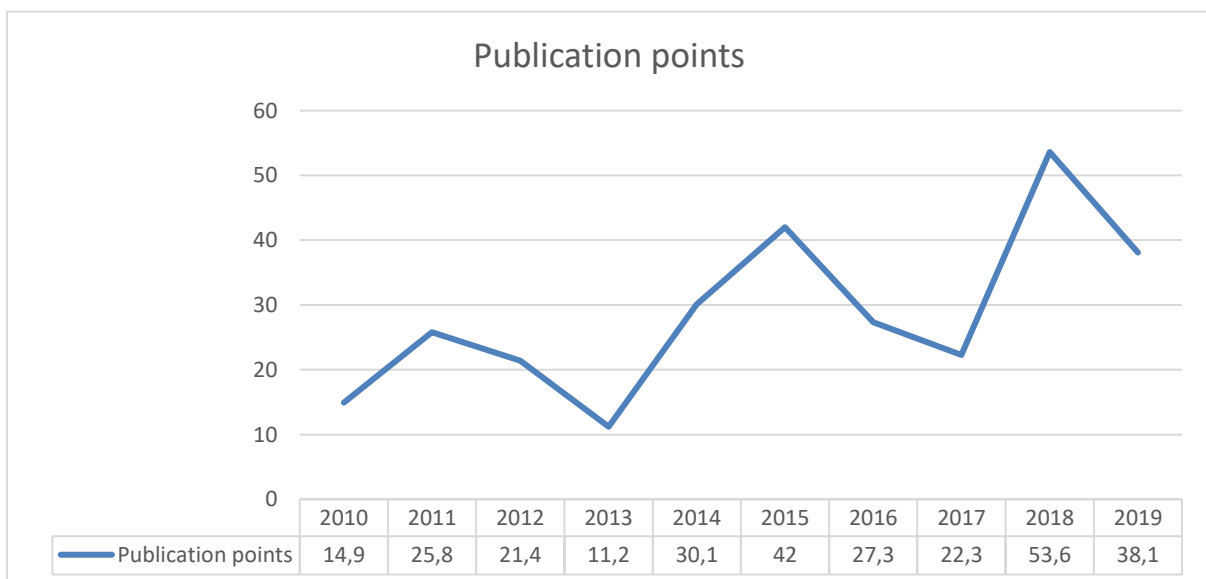
The graph below shows TIKs number of scientific publications in the period 2010-2019:



Source: DBH/Cristin

The continued high number of publications is partly related to the increase in TIK's staff.

Converting the publications to publications points, 2019 gave 38,1 points. The graph below shows TIKs publication points in the period 2010-2019:



Source: Cristin/DBH

In 2015 a new formula for the national publication indicator was introduced in with the aim of closing the gap between the scientific domains. With the old indicator, the Social Sciences and Humanities gained more publication points relative to the Natural Sciences, based in a more traditional publication strategy, where one or just a few authors write monographs. The new indicator is set to even the field, emphasizing, among other things, international cooperation. The high result in publication points in 2018 is due to more co-authored journal publications this year. Of the 53,6 pp 28,83 pp came from journal publications on level 2.<sup>2</sup>

#### **Publications reported to the Norwegian Science Index (NVI) in 2019:**

##### **Amelang, Katrin; Bauer, Susanne.**

Following the algorithm: How epidemiological risk-scores do accountability. *Social Studies of Science* 2019 ;Volum 49.(4) s. 476-502. UiO

##### **Andersen, Allan Dahl; Markard, Jochen.**

Multi-technology interaction in socio-technical transitions: How recent dynamics in HVDC technology can inform transition theories. *Technology Forecasting and Social Change* 2019. UiO

##### **Andersen, Allan Dahl; Steen, Markus; Mäkitie, Tuukka; Hanson, Jens; Thune, Taran Mari; Soppe, Birthe.**

The role of inter-sectoral dynamics in sustainability transitions: A comment on the transitions research agenda. *Environmental Innovation and Societal Transitions* 2019 SINTEF UiO

##### **Asdal, Kristin.**

Is ANT equally good in dealing with local, national and global natures?. I: *The Routledge Companion to Actor-Network Theory*. Routledge 2019 ISBN 9781138084728. s. 337-344. UiO

##### **Bauer, Susanne.**

Beyond the Nuclear Epicenter. Health Research, Knowledge Infrastructures and Secrecy at Semipalatinsk. *Cahiers du monde russe* 2019 ;Volum 60.(2-3) s. 493-516, UiO.

##### **Bauer, Susanne.**

Indexing, Coding, Scoring: The Engine Room of Epidemiology and its Routinized Techno-Digestions. *Somatechnics* 2019 ;Volum 9.(2-3) s. 223-243. UiO

##### **Bauer, Susanne; Güttler, Nils; Schlünder, Martina.**

Encounters in Borderlands: Borderlining Animals and Technology at Frankfurt Airport. *Environmental Humanities* 2019 ;Volum 11.(2) s. 247-279. UiO

##### **Bjørkdahl, Kristian; Druglitrø, Tone.**

When Authority Goes Viral: Digital Communication and Health Expertise on pandemi.no. I: *Pandemics, Publics, and Politics - Staging Responses to Public Health Crises*. Palgrave Pivot 2019 ISBN 978-981-13-2801-5. s. 75-91. UiO

---

<sup>2</sup> DBH:

<https://dbh.nsd.uib.no/pub/pubpoeng.jsp?rapport=pubvekt&aar=2018&niva=5&insttype=1&instkode=1110&avdkode=1110210&seksjonskode=210940&idkode=1110210940>

**Bolwig, Simon; Brekke, Andreas; Strange, Louise; Strøm-Andersen, Nhat.**  
Valorisation of whey: A tale of two Nordic dairies. I: *From Waste to Value: Valorisation Pathways for Organic Waste Streams in Circular Bioeconomies*. Routledge 2019 ISBN 978-0-429-46028-9. s. 162-186. ØSTFOLDFOR UiO

**Brekke, Andreas; Lyng, Kari-Anne Kallerud; Olofsson, Johanna; Szulecka, Julia.**  
Life cycle assessment: A governance tool for transition towards a circular bioeconomy?. I: *From Waste to Value: Valorisation Pathways for Organic Waste Streams in Circular Bioeconomies*. Routledge 2019 ISBN 978-0-429-46028-9. s. 272-292. ØSTFOLDFOR UiO

**Castellacci, Fulvio; Consoli, Davide Francesco; Santoalha, Artur.**  
The Role of E-skills in Technological Diversification in European Regions. *Regional studies* 2019 s. 1-13. UiO

**Castellacci, Fulvio; Dizyee, Kanar.**  
Policy Strategies for Economic Development in Cuba: A Simulation Model Analysis. *Development Policy Review* 2019 ;Volum 37. s. 769-788. UiO

**Cointe, Béatrice; Cassen, Christophe; Nadaï, Alain.**  
Organising Policy-Relevant Knowledge for Climate Action: Integrated Assessment Modelling, the IPCC, and the Emergence of a Collective Expertise on Socioeconomic Emission Scenarios. *Science & Technology Studies* 2019 ;Volum 32.(4) s. 36-57. UiO

**Guillen-Royo, Monica.**  
Sustainable consumption and wellbeing: Does on-line shopping matter?. *Journal of Cleaner Production* 2019 ;Volum 229. s. 1112-1124. UiO

**Hobæk, Bård; Lie, Anne Helene Kveim.**  
Less Is More: Norwegian Drug Regulation, Antibiotic Policy, and the “Need Clause”. *Milbank Quarterly* 2019 ;Volum 97.(3) s. 762-795. UiO

**Hoeyer, Klaus; Bauer, Susanne; Pickersgill, Martyn.**  
Datafication and accountability in public health: Introduction to a special issue. *Social Studies of Science* 2019 ;Volum 49.(4) s. 459-475. UiO

**Karahasanovic, Amela; Hollebeek, Linda D.; Chasanidou, Dimitra; Gurau, Calin.**  
Temporality of Customer engagement in service innovation: a theoretical model. I: *Handbook of Research on Customer Engagement*. Edward Elgar Publishing 2019 ISBN 9781788114882. s. 376-390. SINTEF UiO

**Klitkou, Antje; Capasso, Marco; Hansen, Teis; Szulecka, Julia.**  
New path development for forest-based value creation in Norway. I: *From Waste to Value: Valorisation Pathways for Organic Waste Streams in Circular Bioeconomies*. Routledge 2019 ISBN 978-0-429-46028-9. s. 73-90. NIFU UiO

**Lindberg, Marie Byskov.**  
The EU Emissions Trading System and Renewable Energy Policies: Friends or Foes in the European Policy Mix?. *Politics and Governance* 2019 ;Volum 7.(1) s. 105-123. UiO

**Maiti, Dibyendu; Castellacci, Fulvio; Melchior, Arne.**

Introduction: Digitalisation and Development: Issues for India and Beyond. I: *Digitalisation and Development: Issues for India and Beyond*. Springer Nature 2019 ISBN 978-981-13-9996-1. s. 3-29. NUPI UiO

**Mäkitie, Tuukka; Normann, Håkon Endresen; Thune, Taran Mari; Gonzalez, Jakoba Sraml.**

The Green Flings: Norwegian Oil and Gas Industry's Engagement in Offshore Wind Power. *Energy Policy* 2019 ;Volum 127. s. 269-279. UiO

**Mäkitie, Tuukka Rainer Reinhold.**

Corporate entrepreneurship and sustainability transitions: resource redeployment of oil and gas industry firms in floating wind power. *Technology Analysis & Strategic Management* 2019. UiO

**Normann, Håkon Endresen.**

Conditions for the deliberate destabilisation of established industries: Lessons from U.S. tobacco-control policy and the closure of Dutch coal mines. *Environmental Innovation and Societal Transitions* 2019. UiO

**Pershina, Raissa; Soppe, Birthe; Thune, Taran Mari.**

Bridging analog and digital expertise: Cross-domain collaboration and boundary-spanning tools in the creation of digital innovation. *Research Policy* 2019 ;Volum 48.(9) s. 1-13. UiO

**Reinertsen, Hilde; Asdal, Kristin.**

Calculating the blue economy: producing trust in numbers with business tools and reflexive objectivity. *Journal of Cultural Economy* 2019 ;Volum 12.(6) s. 552-570. UiO

**Santoalha, Artur.**

New indicators of related diversification applied to smart specialization in European regions. *Spatial Economic Analysis* 2019 ;Volum 14.(4) s. 404-424. UiO

**Strøm-Andersen, Nhat.**

Incumbents in the Transition Towards the Bioeconomy: The Role of Dynamic Capabilities and Innovation Strategies. *Sustainability* 2019 ;Volum 11.(5044) s. - UiO

**Strøm-Andersen, Nhat.**

Innovation and by-product valorization: A comparative analysis of the absorptive capacity of food processing firms. *Journal of Cleaner Production* 2019 ;Volum 253. s. -UiO

**Svennevik, Elisabeth M.C..**

The existing and the emerging: Car ownership and car sharing on the road towards sustainable mobility. *International Journal of Automotive Technology and Management* 2019 ;Volum 19.(3-4) s. 281-300 UiO

**Szulecka, Julia.**

Towards Sustainable Wood-Based Energy: Evaluation and Strategies for Mainstreaming Sustainability in the Sector. *Sustainability* 2019 ;Volum 11.(2) UiO

**Szulecka, Julia; Strøm-Andersen, Nhat; Scordato, Lisa; Skrivervik, Eili.**

Multi-level governance of food waste: Comparing Norway, Denmark and Sweden. I: *From*

*Waste to Value: Valorisation Pathways for Organic Waste Streams in Circular Bioeconomies*. Routledge 2019 ISBN 978-0-429-46028-9. s. 253-271. NIFU UiO

**Szulecka, Julia; Szulecki, Kacper.**

Between domestic politics and ecological crises: (De)legitimization of Polish environmentalism. *Environmental Politics* 2019 s. 1-30. UiO

**Tanner, Anne Nygaard; Strøm-Andersen, Nhat.**

Meat processing and animal by-products. I: *From Waste to Value: Valorisation Pathways for Organic Waste Streams in Circular Bioeconomies*. Routledge 2019 ISBN 978-0-429-46028-9. s. 127-144. UiO

**Viñas Bardolet, Clara; Guillen-Royo, Monica; Torrent-Sellens, Joan.**

Job Characteristics and Life Satisfaction in the EU: a Domains-of-Life Approach. *Applied Research in Quality of Life* 2019 s. 1-30. UiO

**Wenaas, Lars.**

Open Access: A Remedy to the Crisis in Scientific Inquiry?. I: *Social Philosophy of Science for the Social Sciences*. Springer Nature 2019 ISBN 978-3-030-33098-9. s. 225-240. UiO