

UiO Centre for Technology, Innovation and Culture University of Oslo

## **ANNUAL REPORT 2023**



# TIK Centre for Technology – annual report 2023

#### **Contents**

Letter from the Director	2
TIK – Facts and figures	3
Staff changes at TIK	4
Organization	4
Research	4
Research projects at TIK in 2023	ε
Education	7
Master programs	7
High quality of applicants	8
Satisfied students	8
Student magazine: Teknovatøren	9
PhD programme track "Technology, Innovation and Culture"	9
Disputations	9
Midway and final seminars	9
Candidates	9
PhD courses and seminars	11
PhD lunches	12
Research communication	12
Web	12
Social media	13
Seminars and workshops at TIK in 2023	13
Publications	15
Publications reported to the Norwegian Science Index (NVI) in 2023:	16

#### **Letter from the Director**

This year TIK was able to move back to a now refurbished Social Science Faculty building and a new start in beautiful surroundings. An important task for the Centre Director in her first year as director of TIK and the first year of normalized working conditions after almost 3 years with the corona pandemic and/or temporary office location, has been to revitalize and solidify the academic working environment at the Centre, with particular regard to information, exchange and collaboration across the Centre's research interests and TIK staff as a whole.

One of the important new initiatives is a series of publication lunches. The Centre's researchers – junior and senior – are invited to present a recent publication, interviewed by a researcher, ideally not from one's own research group, followed by an open discussion. As the title suggests, this is an informal event, taking place in the Centre's lunch area. A main thought behind the event is to learn more about research methods, research results and publication patterns across our two research fields of innovation studies and STS

For the early career researchers, we have started to organize monthly PhD lunches where candidates in the PhD programme meet and share experiences about doing a being a PhD. Sometimes there is also invited guests and visits to related academic institutions.

A network for post doctoral fellows has also been established, with much of the same format as the PhD lunches. The network invites the post doctoral fellows to discuss themes related to their further career as researchers.

We have also organized a TIK-internal summer conference, regular staff meetings and social gatherings.

In line with a key strategic objective and so also the annual plan for TIK, the Centre Director has taken a series of initiatives to strengthen and expand the education portfolio at TIK.

The work has given concrete results and TIK are now for the first time developing bachelor level courses. The courses are and will be offered within the University of Oslo's certificate initiatives – an offer to ambitious bachelor students across the University that want to strengthen their degree by a cross disciplinary component of 20 ECTS. A course on the role of science in sustainability transitions is now organized and taught by TIK as part of the University of Oslo's Sustainability Certificate. TIK is from 2024 co-ordinating the university's Innovation Certificate and will develop and offer the introductory course "Innovation and Society". In the latter the centre will also develop other courses. The work on developing bachelor courses is co-ordinated in a "Task force for Education" headed by the Centre 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 (2023)	31
Master programmes	2
Courses (Masters and Ph. D. courses)	11
PhD-students (per 31.12.2022)	29
Scientific man years (2022 - numbers from DBH, including Centre Director)	29,5
Administrative man years (2022 - numbers from DBH)	4
Total number of man years (2021 - numbers from DBH)	33,5
Budget (2023)	37,5 million NOK
Percent of the budget that is financed by external grants (2023)	67,5 %
Research projects with external financing (2022)	20

#### **Staff changes at TIK**

5 new ph.d students started in 2023: Rakesh Paul, in the Fungateria project, a Horizon Europe project where Ana Delgado is TIK partner, Tokhir Pallaev in the Anthropogenic Soils project, at TIK led by Susanne Bauer, and Chantale Tippett, Torjus Eckhoff and Daniela Sant'Ana in three of TIK's four ph.d. positions financed by the Ministry of Education and Research in the yearly financing TIK receives from the Faculty of Social Sciences. The fourth position was filled in 2022.

Bård Lahn was hired as post doctor in the four year position financed by the same sources as the four PhDs.

Tone Druglitrø started as associate professor in STS, in a four year position substituting for Kristin Asdal in the latter's period as Centre Director.

Researcher Allan Dahl Andersen left TIK in his full time position, but continues in a part time position for the coming years.

As for the administrative staff Lara Kristiansen started as phd and event coordinator.

#### **Organization**

TIK's current board period is 2020-2023 (with 1 year's mandate for the temporary academic staff and students). In 2023 the members of the Board were the following:

- Professor Tore Nilssen, Vice Dean for Research and Chair of the board
- Professor Cathrine Holst, Deputy Chair of the board
- Senior researcher Hege Westskog, External member of the board
- Head of Department Thomas Hoholm, External member of the board
- Professor Magnus Gulbrandsen, Permanent academic staff at TIK
- Researcher Hilde Nykamp, Temporary academic staff at TIK
- Research adviser Ingrid Helene Johnsen, Administrative staff at TIK
- Maria Brox, Student representative spring 2023
- Student Thea Bru, Student representative autumn 2023
- Student Anders Delebekk, Student representative spring 2023
- Student Viktor Emil Bugge, Student representative autumn 2023

In October 2023 the Dean of the Faculty of Social Sciences approved a new set of organizational rules for the TIK Centre. According to the new rules, the Board will from 2024 have a different composition than hitherto. Elections to the new board were conducted in December 2023.

#### 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 investigated as cultural and material practices and 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.

There are several cross-cutting research themes at TIK which encompass researchers from both research fields, for instance the climate issue, the energy transition and the sustainability issue more broadly.

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

In 2023, TIK hosted the Nordic STS conference, which drew the participation of nearly 500 Nordic and international scholars. The conference centred around the theme "Disruption and Repair in and Beyond STS", sparking intellectual discussions and exchanges on various aspects of science, technology, and society. The conference was in part funded through the RCN project STS Methods Lab.

Research projects at TIK are in large part funded through the Research Council of Norway even though TIK's researchers apply for funding from a wide range of funding agencies. In 2023 TIK had a large portfolio of ongoing projects, but no new RCN projects. TIK is however from 2023 partner in the Centre for Excellence in Education CIE, financed by DIKU and has been granted projects from a series of UiO-internal strategic programs. The University of Oslo provides funding for research projects, mainly through the cross disciplinary institutional strategic initiatives UiO:Energy and Environment, UiO:Life Sciences and UiO: Democracy. TIK is part of the UiO:Life Science convergent environment COMPARE. In 2023 TIK acquired 1 project financed by UiO:Democracy and 1 project financed by the SPARK Social Innovation initiative at UiO:Energy and Environment, both will start in 2024.

TIK coordinates two research centres financed through the Research Council of Norway's FORINNPOL programme. In 2023 one of the centres, The Centre for the study of innovation policy for industrial transformation, sustainability and digitalization (INTRANSIT) passed its midterm evaluation. The other centre, OSIRIS - Oslo Institute for Research on the Impact of Science, is in its final stages, with the final conference planned for November 2024.

Following national and university strategic decisions, TIK has also applied and participated in EU-funded research through the Horizon Europe Research Programs. In 2023, TIK coordinated two project application to EU programme Marie Sklodowska Curie Actions. TIK is also partner in one project, Bringing mycelium-based materials into an 'Engineered Living Materials' context (Fungateria), funded by the EU.

## Research projects at TIK in 2023

Research projects at 11			END DATE	
PROJECT	PROJECT LEADER	STARTING DATE		FUNDING
OSIRIS	Magnus Gulbrandsen	01-mai-2016	28-feb-2025	NFR – FORINNPOL NAV
COMPARE	Kristin Asdal	01-jan-2017	31-des-2023	UiO:Life Science
INTRANSIT	Taran Thune	01-jan-2019	31-des-2026	NFR – FORINNPOL
Conflicting Transition Pathways for Deep Decarbonization	Allan Dahl Andersen	01-okt-2019	01-aug-2024	NFR – ENERGIX
BREAD - Building Responsibility and Developing Innovative Strategies for Tackling Food Waste	Julia Szulecka	01-sept- 2019	28-feb-2023	NFR
NTRANS - Norwegian Centre for Energy Transition Strategies	Allan Dahl Andersen	01-aug-2019	28-feb-2028	NFR - FME - via NTNU
Bridging Boundaries	Susanne Bauer	01-mai-2019	31-aug-2023	DIKU
ResBod - Resisting bodies: The politics and practices of the immune system	Tone Druglitrø	01-feb-2020	31-des-2025	NFR
ValueThreads: Tracing the economy as technology and culture in an emergent value-economy	Kristin Asdal	01-des 2020	31-des-2027	NFR
Evalunation: Evaluation Optics of the Nation State: The Past, Present and Future of Public Documentation	Hilde Reinertsen	01-Dec- 2020	20-apr-2025	NFR
Urbtrans: Urban Transformation in a Warming Arctic – The continued effects of Nordic colonialism in urban planning and development	Tone Huse	01-okt-2020	31-mar- 2025	NFR via Univ. of Tromsø
NorwAI - The Norwegian Research Center for AI Innovation	Susanne Bauer	01-okt-2020	30-sep-2025	NFR-SFI via NTNU
Riggnæringen. 50 år i grenselandet mellom menneskelig kapasitet, teknologi og natur	Helge Ryggvik	01-des-2020	31-mar- 2023	Norsk Oljemuseum
STS Methods Lab	Susanne Bauer	01-nov-2020	30-jun-2024	NFR - ISPSAM

Innovation, Welfare and	Fulvio	30-des-2020	31-des-2024	NFR – ISPSAM
Policy: Scientific	Castellacci	30 des 2020	J1 des 2024	TVI IC IOI OI IVI
development and renewal of	Castenacei			
TIK's research group in				
innovation studies				
OFFLEX: Offshore energy	Taran Thune	01-jan-2021	31-des-2023	NFR- Knowledge-
system optimisation	Turum Thume	01 jun 2021	J1 des 2023	building Project for
considering load and storage				Industry via Sintef
flexibility				Energy
Historicizing Intelligence	Susanne	01-aug-2021	01-aug-2024	NFR via KHM/UiO
Tests, metrics and the	Bauer			
shaping of contemporary				
society				
CaptureX: Socio-technical	Allan Dahl	01-jan-2022	31-aug-2024	NFR via Sintef AS
drivers, opportunities and	Andersen			
challenges for large-scale				
CCUS				
CoPol: Covid-19 contact	Ana Delgado	01-jan-2022	31-jul-2024	RCN via Univ. of
tracing as Digital Politics		-		Bergen
Anthropogenic soils:	Susanne	01-aug-2022	31-jul-2028	RCN – Fellesløftet
Recuperating Human-Soil	Bauer			via IKOS/HF/UiO
Relationships on a troubled				
Planet				
FUNGATERIA: Enlisting	Ana Delgado	01-nov-2022	31-okt-2026	Horizon Europe via
synthetic fungal-bacterial				KDAK,
consortia to produce multi-				Copenhagen
cellular mycelium-based				
ELMs with computational				
capability				
INTED Centre for	Markus	01-jan-2023	31-12-2023,	DIKU Centre of
Interdisciplinary Education	Bugge		possible	Excellence in
			prolongation	Education

In addition, in 2023 TIK had three PhD candidates through the RCN OFFPHD programme, and two NÆRINGSPHD, all organized as externally financed projects.

#### **Education**

Whereas external financing has mainly been reserved research projects, the last years have seen a turn to external financing also in the educational field. The participation in the Centre for Excellence in Education mentioned in the paragraph above is an example of a project where both research and education are central components. TIK has also from 2022 hosted one of the University of Oslo's Academic Chairs in the cooperation programme Circle U where funding comes from the EU. Markus Bugge is Academic Chair for the platform InCU.bator, an arena for challenge-based learning and support for students to develop innovation skills and entrepreneurship projects. TIK's education activities are also supported by the rectorate (1,2 mill NOK to the Innovation certificate) and UiO:Energy (100 000 NOK to the sustainability certificate course developed by Bård Lahn) and also EILIN (at the Faculty level, 200 000 NOK to a project on AI, initiated by Hilde Reinertsen, chaired by Knut Jørgen Vie).

#### **Master programs**

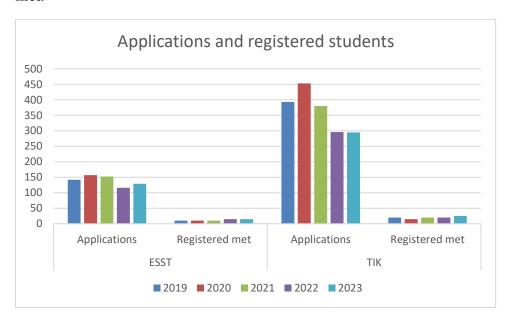
TIK offers two programmes at the master level:

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

40 master students are admitted every year as of 2022. 25 are admitted to the TIK and 15 to the ESST-program. In 2023, 50 students were admitted. 30 to TIK, and 20 to ESST. The number of students registered met at the beginning of the term are normally lower than the number admitted, in 2023 40 students were registered met.

In 2023 the total number of completed master's degrees were 22 (12 TIK, 10 ESST).

As for the total number of applications TIK's programmes followed the general trend with a marked increase during the corona pandemic. The total number of applications in 2022 and 2023 are below the years pre corona (535 applicants in 2019 vs. 412 and 424 in 2022 and 2023), but do not seem to have an effect on the number of students admitted and registered met.



Source: DBH

#### High quality of applicants

National students can apply to a maximum of three UiO programmes any given year at the master's level. Applicants must then rank the chosen programmes in a prioritized manner.

In 2015, around 100 of the applicants had TIK/ESST as their number one priority. In 2018 this number had increased to 171. In 2023, we had 128 first priority applicants out of 424 in total.

The grade point average (GPA) of applicants has gradually risen in the 2010s, and from 2020 onwards, the applicants needed a GPA of no less than B or B+ in order to be admitted, even though the number of admitted applicants has risen from 2022 onwards.

#### **Satisfied students**

Studiebarometeret, an annual survey of student satisfaction, was conducted among TIK students last year. They reported a score of 4,7 (1–5 scale, 5 being the highest score) in overall satisfaction with their master's program. The national average score in social sciences and

law was 3,8, and 4,7 was the highest score recorded among 25 master's programs within social sciences and law at UiO.

#### Student magazine: Teknovatøren

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

The thematic titles for the two editions in 2023 were *Power* (#22) and *Gender & Identity* (#23).

#### PhD programme track "Technology, Innovation and Culture"

Professor Susanne Bauer has been coordinator of TIK's PhD programme track during 2023, sharing with Tone Druglitrø from December 2023.

#### **Disputations**

There were five disputations in 2023.

On 27 January Helena Nynäs defended her dissertation "Sublime Fossefall - et bidrag til de høye fossenes kulturhistorie i Norge".

On 19 June Irene Øvstebø Tvedten defended her dissertation "Shades of Green: Calculating natures, infrastructures and futures".

On 17 August Jørgen Aarhaug defended his dissertation "Digitalisation in mobility – How digital technologies can influence sustainability transitions in urban passenger mobility".

On 22 September Alina Kontareva defended her dissertation "National Platforms in a Globalized World: Competitive Strategies and the Role of the State in the Case of Russian Digital Platforms".

On 19 December Tércio Ávila Pinho Filho defended his dissertation "Contracting and Innovation in Megaprojects".

#### Midway and final seminars

There were five midway and one final seminar in 2023.

- On 12 April, Kristin Oxley held her midway seminar.
- On 5 May, Tommas Måløy held his final seminar.
- On 5 June, Martin Refseth held his midway seminar.
- On 22 August, Benjamin Donald Smith held his midway seminar.
- On 10 November, Lisa Scordato held her midway seminar.
- On 5 December, Stine Engen held her midway seminar.

#### **Candidates**

TIK welcomed six new candidates during 2023, and had the following candidates enlisted in the program as of December 31<sup>st</sup> 2023.

### In total TIK had 29 candidates enrolled in the TIK PhD program in 2023:

Candidate	PhD project	Supervisor(s)
Daniela Sant'Ana		Ana Delgado
Tokhir Pallaev	Technosciences of Soil in Soviet and Contemporary Central Asia	Susanne Bauer
Rakesh Paul	Participatory prototyping and future making for Engineered Living Materials	Ana Delgado
Torjus Solheim Eckhoff	Technological development and the aspiration of control: Norwegian politicians, issue-experts and the discourse of Information Technology	Kristin Asdal
Chantale Tippett	Using Artificial Intelligence in food systems transitions: Who wins, who loses and who decides?	Allan Dahl Andersen and Ana Delgado
Elisabeth Fosseli Olsen	Innovation in International Development. Investigating the co-creation and business modeling for scalable solutions contributing to poverty eradication	Kristin Asdal and Taran Thune
Stine Engen	Accounts and other valuation tools: How valuation is changing (and resisting change) in the valueeconomy	Kristin Asdal
Tércio Pinho Filho	Actors recomposition in the O&G industry: a case study for adaptation and innovation from subsea suppliers	Helge Ryggvik
Jørgen Finstad	The transition dynamics of complex technologies – lessons from carbon capture and storage	Allan Andersen and Taran Thune
Cyriac George	Transition pathways in context: a sociotechnical analysis of hydrogen fuel in the Norwegian transportation sector.	Olav Wicken
Bård Hobæk	Salmon Sustainabilities	Kristin Asdal
Tanja Knaus	Algorithmic Emotion Regulation - the Fusion of Human and Nonhuman Agency in the Workplace	Susanne Bauer
Sylvia Lysgård	Hva dreier det seg om? Næringsliv, politikk og praksiser i to norske (miljø)saker.	Göran Sundqvist
Tommas Måløy	Valuation in genomic databases: a case study on the Aqua Genome Project	Kristin Asdal
Kristin Oxley	Ukonvensjonell, tverrfaglig forskning: Hvordan legge til rette for gode søknadsbehandlingsprosesser	Magnus Gulbrandsen
Martin Refseth	Urban Planning and Development in Nuuk, Greenland 1950-1980	Tone Huse and Inge Seiding (Grønlands University)
Frauke Rohden	Tracing the impact of scientific research in online spaces	Magnus Gulbrandsen and Susanne Bauer
Lisa Scordato	Innovation competence and skills in the public sector for handling unforeseen events	Magnus Gulbrandsen and Glenn-Egil Torgersen

		(Universitetet i Sørøst-Norge)
Erlend Osland	Manning the gunnlier industry	Taran Thune
Simensen	Mapping the supplier industry	Taran Thune
Kari-Elisabeth	The impact of research on policy on empirical	Taran Thune and
	The impact of research on policy: an empirical	
Vambeseth Skogen	study of the use of scientific knowledge in	Magnus
	policymaking in Norway	Gulbrandsen, mentor Geir
Daniania Carith	The effective December 11 and 1 and	Arnulf
Benjamin Smith	Transformative Research and Innovation Policy for Net-Zero	Taran Thune
Gro Stueland	Audit and edit. An ethnography of evaluation	Hilde Reinertsen
Skorpen	documents in offices and online	and Tone Walford
D.11. 01	T 1 1 1	TT 1 D '1
Eili Skrivervik	Innovation and technology transfer in field-	Helge Ryggvik
	development projects on Norway, Brazil and	
3.5 ' Q.'!!!'	U.S. GoM	TZ ' .' A 1 1
Marie Stilling	Nourishing Weeds: Valuating Macroalgae	Kristin Asdal
Cil. M.	Growth in an Emerging Economy	m ml
Silje Marie	Innovation policy and sustainable transition	Taran Thune
Svartefoss	1	77 1 D '1
Kasper Rogde	An Innovative Century? The origins for	Helge Ryggvik
Søyland	advanced aluminium prefabrication	0" 0 1 1
Tina Naomi	Unlocking the Black Box of Nuclear	Göran Sundqvist
Talleraas	Disarmament:	
	A case study of the Norwegian initiative to re-	
	politicize the bomb	
Hanne Castberg	Praksiser og politikk knyttet til forskning på	Tone Druglitrø
Tresselt	immunsystemet	and Gail Davies
Kjersti Aalbu	Aligning shipping with the Paris Agreement:	Susanne Bauer
	Expert knowledge, the IMO, and a decarbonised	and mentors
	shipping industry in the making	DNV-GL
Sissel Småland	The infrastructure of responsibility	Ana Delgado
Aasheim		

#### PhD courses and seminars

TIK9102 Compulsory seminars:

Spring: 11 – 12 May 2023 (9 participants)

Autumn: 30 January 2024 (postponed from December 2023, 5 participants)

TIK9015 - PhD course: Practice-Oriented Document Analysis

6 - 10 November 2023 (23 participants)

#### EDS426 - Extraction Ethnographies

(Collaboration between the Department of International Environment and Development Studies at NMBU and TIK)

17 – 21 April 2023 (15 participants)

TIK9015 and the collaborative PhD course EDS426 was organized within the "STS Methods Lab" project, contributing to its aim of strengthening methods competencies by means of establishing and conducting a series of national PhD courses.

TIK is member of two research schools: The Nordic Research School in Innovation and Entrepreneurship (NORSI) and The Norwegian Research School on Digitalization, Culture and Society (DIGIT).

NORSI is a research school for PhD students in the Nordic countries within the field of innovation and entrepreneurship. NORSI works to enhance and strengthen the Nordic innovation and entrepreneurship research education and community.

DIGIT works to overcome the fragmentation of the scientific communities in Norway conducting social and cultural studies of digital technologies, by bringing together and facilitating dialogue between humanities and social sciences and non-academic partners.

#### **PhD lunches**

TIK organises regular lunch gatherings for both internal and external PhD candidates, where questions and topics relevant for the whole group are addressed, guests are invited, and different research institutions are visited. During 2023, there were seven PhD lunches:

Date	Topic/Guest
10.03.2023	Kick-off
11.04.2023	Markus Bugge: Teaching as a PhD candidate
09.05.2023	Brooke Struck: Philosophy of Social Science
23.08.2023	Visit to NIFU
17.10.2023	Analyzing qualitative interview data
15.11.2023	Inger-Johanne Ullern and Torjus Solheim Eckhoff: Being employed as a PhD-candidate
12.12.203	Reflections on 2023 and plans for 2024

#### Research communication

#### Web

During 2023, four research-based news articles were written for TIK's web page.

- "- Skal vi leggje til rette for det grøne skiftet, må vi forstå hindringane"
   Interview with Allan Dahl Andersen from TIK's Innovation group about his and Magnus Gulbrandsen's research on sustainable transitions (109 page views since publication in February).
- "TIK-konferanse over alle forventninger"
   Interview with Centre Director Kristin Asdal from the STS group about the Nordic STS Conference, which was hosted by TIK at Blindern Campus with 450 participants in June 2023 (84 page views since publication in June).
- "Jordsmonn har blitt ødelagt. Nå må vi bøte på skadene" Interview with Susanne Bauer from the STS group about her research on human-soil relationships within the Anthropogenic Soils project as well as her book "Tracing the

Atom. Nuclear Legacies in Russia and Central Asia" (79 page views since publication in August).

• "Norge i delikat klimaspagat" Interview with Bård Lahn from the STS group on his research about Norwegian climate and energy politics (unknown page views since publication in December).

In addition to "Research News", TIK webpages have three headlines that report on TIK researchers' communication activity: "News", "Publications", and "TIK i media" (only in Norwegian).

22 shorter news articles/notices were posted online, 105 publications were announced and 3 TIK in media was reported in 2023. The list does not cover all activity at TIK, and different research groups/projects/people favour different "lines" of communication and dissemination.

Our web pages in English are viewed 210 times (2022: 397) the last 30 days and our web pages in Norwegian are viewed 444 times (2022: 663) the same period. This means that TIK produces 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.

TIK have two blogs tied to different research projects that post with different frequency, and with different reach.

#### Social media

TIK has been on X/Twitter since 2012 and on Facebook since 2015, where we have published news, events, publications, available positions, TIK Talks, student information etc. As of December 2023, TIK has around 800 followers on X/Twitter, and 700 likes/750 followers on Facebook.

Through Twitter we first and foremost aim at reaching our local and international research community. Our Facebook page mainly targets potential applicants for the master and PhD programs, and alumni. A LinkedIn group for building TIK's alumni network was also created at the end of 2023 (public launch planned in 2024).

#### Seminars and workshops at TIK in 2023

Date	Speaker/Organizer	Title
16.03.2023	Kyrre Kverndokk and Marit Ruge Bjærke, University of Bergen	STS Methods Lab: Gardening the Globe
21.03.2023	Kristin Asdal and Lara Kristiansen, TIK	TIK publication lunch with Allan Dahl Andersen, Bård Lahn, Silje Maria Tellmannn, Knut Jørgen Vie and Tone Druglitrø
13.04.2023	David Ribes, University of Washington	STS Methods Lab: Traces and Scale in Ethnography

24.04.2023	Kristin Asdal and Lara Kristiansen, TIK	TIK publication lunch with Taran Thune, Gro Skorpen, Magnus Gulbrandsen and Bård Lahn
24.05.2023	Tine Damsholt, University of Copenhagen	STS Methods Lab: Practising viable futures in everyday life
26.05.2023	Kristin Asdal and Lara Kristiansen, TIK	TIK publication lunch with Tone Druglitrø, Keija Yang, Jørgen Aarhaug and Elisabeth Fosseli Olsen
31.05.2023	Kate Brown, MIT	STS Methods Lab: Earth Adventure: Getting to Know My Inner Soil
07 09.06.2023	STS group	6 <sup>th</sup> Nordic STS Conference
08.06.2023	Innovation group	Innovation lunch with Jan Fagerberg: The global green shift: More evolution than revolution
21.06.2023	Daniel Breslau, Virginia Polytechnic Institute and State University	The politics of manipulation in US electricity markets: The MOPR saga
22.06.2023	Helge Jordheim, University of Oslo	Time Jams, or When Time Doesn't Flow
23.08.2023	STS group	Trial lectures for temporary position as Associate Professor in STS at TIK by Thomas Keating, Christian Sørhaug and Tone Druglitrø
21.09.2023	Kristin Asdal and Lara Kristiansen, TIK	TIK publication lunch with Håkon Endresen Normann, Stine Engen, Tuukka Mäkitie and Kjersti Aalbu
19.10.2023	Kristina Lyons, University of Pennsylvania	STS Methods Lab: Rivers and Reconciliation: Elaborating the socioecological memory of war through science and arts-based practices
26.10.2023	Kristin Asdal, Tone Huse, Susanne Bauer, Bård Lahn, TIK. Maka Suarez, Department of Social Anthropology, UiO, Ola Innset, BI Oslo.	TIK publication lunch: Launch and lounge seminar of the book "Nature-Made Economy"
31.10.2023	Kristin Asdal and Tone Huse, TIK,	"Natur og økonomi: Evige motsatser?" Panelsamtale på Litteraturhuset

	Andreas Bjelland Eriksen, Minister of climate and environment, Kristin Halvorsen, Director at CICERO, Aksel Mjøs, BI Bergen, Karine Nyborg, Department of Economics, UiO, Terje Erikstad, Dagens Næringsliv.	
09.11.2023	Jill Rettberg, University of Bergen , Pierre Lison, Norwegian Computing Center Oslo	STS Methods Lab: "Machine vision' and algorithms as study objects", "Language models, algorithms and machine learning"
04.12.2023	Maximilian Fochler, University of Vienna	A good life in the (life) sciences? Junior researchers' perspectives on being and knowing in contemporary academia
04.12.2023	Susanne Bauer, Taran Thune, Jørgen Finstad, Elin Lerum Boasson, Department of Political Science, UiO and Maximilian Fochler, University of Vienna	Panel discussion: What is a good, article-based PhD dissertation?
05.12.2023	Kristin Asdal, Lara Kristiansen	TIK publication lunch with Bård Lahn, Hilde Nykamp, Markus Bugge and Torjus Solheim Eckhoff

The list is not exhaustive. Both research groups have regular meetings with presentations of ongoing work, external guests and other relevant activities, and not all are included here.

Many TIK researchers are highly active also in external seminars as key note speakers, part of panel discussions and other the list above does not reflect this. A series of seminars and workshops with external participants are also organized withing the frame of the respective research projects at TIK.

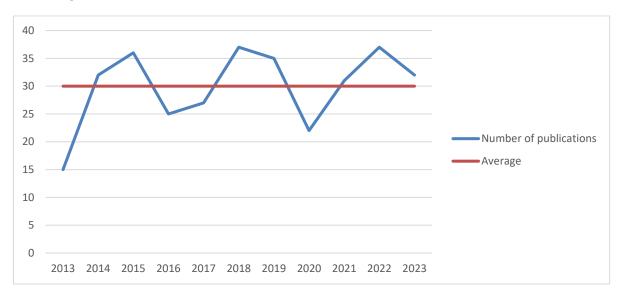
#### **Publications**

A total of 32 publications are at the time of the annual report registered in the Cristin database in 2023. Both junior and senior researchers continue to publish in prestigious

 $^{\mathrm{1}}$  Minor changes might occur until the final Cristin reporting deadline in April 2023.

journals in the fields of innovation studies and STS. 7 out of the 32 publications were published in level 2 publications.

The graph below shows TIKs number of scientific publications in the period 2013-2023, with an average of 30:



Source: DBH/Cristin

The data regarding the publications points for 2023 is not yet available from the national registers. Publication points per academic man year will thus be reported on a later date.

#### Publications reported to the Norwegian Science Index (NVI) in 2023:

In the list below the articles are listed alphabetically according to author from TIK. When articles have been moved to follow this alphabetical order, the name of the author(s) registered at TIK is underlined.

## Aarhaug, Jørgen; Fearnley, Nils; Hartveit, Knut Johannes Liland; Johnsson, Espen.

Price and competition in emerging shared e-scooter markets. *Research in Transportation Economics* 2023 ;Volum 98.(May 2023) s. 1-8

#### Andersen, Allan Dahl; Geels, Frank W..

Multi-system dynamics and the speed of net-zero transitions: Identifying causal processes related to technologies, actors, and institutions. *Energy Research & Social Science* 2023; Volum 102.

Andersen, Allan Dahl; Geels, Frank Willem; Coenen, Lars Martel Antoine; Hanson, Jens; Korsnes, Marius; Linnerud, Kristin; Mäkitie, Tuukka; Nordholm, Amber Joy; Ryghaug, Marianne; Skjølsvold, Tomas Moe; Steen, Markus; Wiebe, Kirsten Svenja.

Faster, broader, and deeper! Suggested directions for research on net-zero transitions. *Oxford Open Energy* 2023 ;Volum 2. s. 1–7

Andersen, Allan Dahl; Geels, Frank Willem; Steen, Markus; Bugge, Markus. Building multi-system nexuses in low-carbon transitions: Conflicts and asymmetric

adjustments in Norwegian ferry electrification. *Proceedings of the National Academy of Sciences of the United States of America* 2023 ;Volum 120.(47)

#### Andersen, Allan Dahl; Markard, Jochen; Bauknecht, Dierk; Korpås, Magnus.

Architectural change in accelerating transitions: Actor preferences, system architectures, and flexibility technologies in the German energy transition. *Energy Research & Social Science* 2023; Volum 97. s. 1-22.

#### Asdal, Kristin.

From scarce resources to 'the good economy': A new 'version of economization' replacing Weber's rational ascetism as the capitalist spirit? Journal of Cultural Economy, 15(6), 849–853.

#### Asdal, Kristin.

The Nature and Politics of Documents: The Anthropocene as a Document Site. I: Responding to the Anthropocene: Perspectives from Twelve Academic Disciplines. Scandinavian Academic Press 2023 ISBN 978-82-304-0362-4. s. 245-266

#### Asdal, Kristin; Huse, Tone.

Nature-Made Economy: Cod, capital and the great economization of the ocean. MIT Press 2023 (ISBN 9780262545525) 280 s.

## Hoag, Colin; Heyman, Josiah; <u>Asdal, Kristin; Reinertsen, Hilde</u>; Hull, Matthew.

Government Analytics. Using Anthropological Methods. I: *The Government Analytics Handbook: Leveraging Data to Strengthen Public Administration*. World Bank 2023 ISBN 978-1-4648-1981-0. s. 645-655

#### Bugge, Markus; Berg, Richard; Tømte, Cathrine Edelhard.

Transformative innovation policies detached from existing systems of innovation in the global south. *Innovation and Development* 2023

## Elvik, Rune; Nævestad, Tor-Olav; Milch, Vibeke; <u>Bugge, Markus</u>; Normann, Håkon Endresen; Skogli, Erland.

Innovation and long-term planning in public policy: the case of national road safety plans in Norway. *Traffic Safety Research (TSR)* 2023; Volum 5.(2023) s. 1-19

#### Consoli, Davide; Castellacci, Fulvio; Santoalha, Artur.

E-skills and income inequality within European regions. *Industry and Innovation* 2023. S. 919–946

#### Druglitrø, Tone.

Nonhuman Primates in Public Health: Between Biological Standardization, Conservation and Care. *Journal of the History of Biology* 2023

#### Fagerberg, Jan Ernst.

Det globale grønne skiftet: Mer evolusjon enn revolusjon. I: *Internasjonal Politikk* 2023. Vol. 81 hefte 3. ( ISSN 0020-577X). s. 465-491

#### Fagerberg, Jan Ernst; Normann, Håkon Endresen.

Innovation policy, regulation and the transition to net zero. I: *Handbook of Innovation and Regulation*. Edward Elgar Publishing 2023 ISBN 978 1 80088 446 5. s. 163-191

#### Finstad, Jørgen; Andersen, Allan Dahl.

Multi-sector technology diffusion in urgent net-zero transitions: Niche splintering in carbon capture technology. *Technological Forecasting and Social Change* 2023; Volum 194.

#### Kontareva, Alina, Kenney Martin.

National markets in a world of global platform giants: The persistence of Russian domestic competitors. I: *Policy & Internet* 2023 vol. 15 s. 327-350. (ISSN 1944-2866)

#### Lahn, Bård.

Klimapolitikk i oljestaten: Robust folkestyre eller sementerte næringsinteresser?. *Norsk sosiologisk tidsskrift* 2023 ;Volum 7.(4-5) s. 63-75

Asayama, Shinichiro; de Pryck, Kari; Beck, Silke; Cointe, Béatrice; Edwards, Paul N.; Guillemot, Hélène; Gustafsson, Karin M.; Hartz, Friederike; Hughes, Hannah; Lahn, Bård; Leclerc, Olivier; Lidskog, Rolf; Livingston, Jasmine E.; Lorenzoni, Irene; MacDonald, Joanna Petrasek; Mahony, Martin; Miguel, Jean Carlos Hochsprung; Monteiro, Marko; O'Reilly, Jessica; Pearce, Warren; Petersen, Arthur; Siebenhuner, Bernd; Skodvin, Tora; Standring, Adam; Sundqvist, Göran; Taddei, Renzo; van Bavel, Bianca; Vardy, Mark; Yamineva, Yulia; Hulme, Mike.

Three institutional pathways to envision the future of the IPCC. *Nature Climate Change* 2023 ;Volum 13. s. 877-880

#### Nykamp, Hilde Andrea; Andersen, Allan Dahl; Geels, Frank Willem.

Low-carbon electrification as a multi-system transition: a socio-technical analysis of Norwegian maritime transport, construction, and chemical sectors. *Environmental Research Letters* 2023; Volum 18.(9)

#### Saidi, Trust; Gulbrandsen, Magnus.

Emergency circumstances call for extraordinary measures: a study of research council COVID-19 emergency call projects. *Innovation: Organization and Management* 2023

## Saidi, Trust; Mork, Erlend; Aminoff, Sofie Ragnhild; Lobban, Fiona; Romm, Kristin Lie.

Crossing boundaries in the delivery of healthcare – a qualitative study of an eHealth intervention in relation to boundary object theory. *Digital Health* 2023; Volum 9. s. 1-11

#### Salie, Faatiema; Saidi, Trust.

Nanomedicine drug delivery in South Africa: a retrospective study on research, funding and collaboration. *Frontiers in Pharmacology* 2023; Volum 14.

#### Svartefoss, Silje Marie.

THE ROLE OF BOARD INTERLOCKS IN INCREASING THE USE OF WOOD IN CONSTRUCTION. I: *Proceedings from the 13th World Conference on Timber Engineering. WCTE 2023.* Curran Associates, Inc. 2023 ISBN 9781713873273. s. 4555-4564

#### Lyby, Lars; Tellmann, Silje Maria.

Forskningskommunikasjonens scenografi: Sosialt og materielt samspill ved klimatoppmøtet i Paris. I: *Formidlende omstendigheter*. Universitetsforlaget 2023 ISBN 9788215052571. s. 218-234

## Thune, Taran Mari; Reymert, Ingvild; Gulbrandsen, Magnus; Simensen, Erlend Osland.

Populating the science-policy co-production space: academic and policymaker perspectives on knowledge exchange. *Studies in Higher Education* 2023; Volum 48.(5) s. 733-746

## Forsberg, Ellen-Marie; Corceolani, Matteo; <u>Szulecka, Julia; Strøm-Andersen,</u> Nhat.

Widening the scope of responsible innovation: food waste and the role of consumers. *Journal of Responsible Innovation* 2023 ;Volum 10.(1)

#### Gjefsen, Mads Dahl; Vie, Knut Jørgen.

Uregjerlige virkemidler: Utfordringer i tverrfaglig kommunikasjon. I: *Formidlende omstendigheter*. Universitetsforlaget 2023 ISBN 9788215052571. s. 177-196

## Godskesen, Tove; <u>Vie, Knut Jørgen</u>; Bülow, William; Holmberg, Bodil; Helgesson, Gert; Eriksson, Stefan.

How do journals publishing palliative and end-of-life care research report ethical approval and informed consent?. *Learned Publishing* 2023; Volum 36.(4) s. 554-563

# Kennedy, Mari-Rose; Deans, Zuzana; Ampollini, Ilaria; Breit, Eric Martin Alexander; Bucchi, Massimiano; Seppel, Külliki; <u>Vie, Knut Jørgen;</u> Ter Meulen, Ruud.

"It is Very Difficult for us to Separate Ourselves from this System": Views of European Researchers, Research Managers, Administrators and Governance Advisors on Structural and Institutional Influences on Research Integrity. *Journal of Academic Ethics* 2023 ;Volum 21. s. 471-495

#### Vie, Knut Jørgen; Gjefsen, Mads Dahl.

Hva skaper tillit når forskere snakker om banebrytende teknologi? Erfaringer fra opplæring i forskningsformidling. I: *Formidlende omstendigheter*. Universitetsforlaget 2023 ISBN 9788215052571. s. 197-217

#### Yang, Kejia.

Spatial diffusion and niche shielding dynamics: Wind power development in China. *Energy Research & Social Science* 2023 ;Volum 105.