

**NAME** : Roy Johnsen  
**DATE OF BIRTH** : 23 February 1956  
**NATIONALITY** : Norwegian  
**PRESENT POSITION** : Professor Corrosion and Surface Protection  
**ORCID ID** : <https://orcid.org/0000-0002-5449-7396>


**MEMBERSHIP OF ACADEMIC SOCIETIES**

2011 Norwegian Academy of Technological Sciences - NTVA  
 2019 The Royal Norwegian Society of Sciences and Letters – DKNVS

**DEGREES:**

1981 – 1984 PhD from NTNU, Trondheim, Norway (former NTH). Title of the thesis: "Numerical calculation of current- and potential distribution in connection with cathodic protection and galvanic corrosion of different steels."  
 1975 – 1979 M.Sc. in Material Technology, the Norwegian Institute of Technology (NTH), Trondheim Norway

**AWARDS:**


2020 NACE International - Frank Newman Speller Award. This prestigious award is given in recognition of outstanding contributions to corrosion engineering. (<https://www.nace.org/membership/member-resources/awards>)

**POSITION OF TRUSTS:**

2009 - 2010 Chairman of the Board SIV Teknisk AS, Surnadal  
 2006 – 2010 Member of the Board Sensorlink AS, Trondheim  
 2003 – present Board Member of The Norwegian Society of Maintenance - NFV  
 1994 – 2005 Board Member of The Petroleum Society of Norway (NPF), Trondheim Region.  
 1990 – 1996 Board Member of The Norwegian Maintenance Society (Norsk Forening for Vedlikehold – NFV).  
 1989 – 1997 Board Member of Trondelag Corrosion Society. Served four years as Chairman of the Board.

**PROFESSION:**

2017 - present Curtin University, Perth Australia – Visiting Professor  
 2017 – present University of Dar es Salaam, Tanzania (TZ-UDSM) – Responsible for MSc course "Corrosion and Corrosion Protection in Oil & Gas"  
 2004 – present Norwegian University of Science and Technology (NTNU) Professor – Corrosion and Surface Protection

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**2011/2012**

***Sabbatical from NTNU***

01/2012 – 12/2012

*Qatar Petroleum, Doha Qatar*  
Chief Researcher – Materials and Corrosion

07/2011 – 12/2011

*Statoil (today Equinor)*  
Materials Department – working with selected project related to operation

07/2003 – 12/2003

FORCE Technology Norway AS  
Chief Engineer Integrity Management

1991 – 06/2003

CORROCEAN ASA  
Technical Director/Marketing & Sales Director

1988 – 1991

STATOIL RESEARCH CENTRE  
Department Manager Material Technology

1985 – 1988

STATOIL RESEARCH CENTRE  
Senior Engineer

1981 – 1985

THE CORROSION CENTRE, SINTEF  
Research Engineer

**EXPERIENCE – EMPHASIS ON WORK RELATED TO INNOVATION AND BUSINESS SECTOR:**

2008 - 2010

Participated in the establishment of SIV Teknikk AS (org.nr.: 991606653).  
**Business idea:** Offering services within machining and thermal spraying to the industry.

2007 - 2010


Active participation in product and business development for Sensorlink AS (org.nr.: 977043697). **Business idea:** Development of equipment for condition monitoring based on ultrasound technology.

1991 – 2003

Active participation in product and business development of CorrOcean AS as member of the management team. The company grew from a small company with 30 employees (1991) to > 300 employees in 2002. This period included several merges with Norwegian and international companies and listing on the Norwegian Stock Exchange in 1997.

**PRESENT RESEARCH ACTIVITIES AND FIELD OF INTEREST:**

1. **Cathodic protection (CP)** of structures and components in seawater. This covers both design of CP systems according to common standards like e.g. DNV RP-B401, selection of anodes, modeling of current and potential distribution.
2. **Coatings for corrosion and erosion/wear protection.** CP is normally combined with organic coatings (a paint system). Selection of the "right" coating system for a specific application is important to optimize the life cycle cost. Metallic coatings like hot dip galvanizing, thermal sprayed aluminium or zinc are alternatives to paint under atmospheric conditions. Thermal sprayed wear coatings (e.g. WC CoCr) are important to secure necessary lifetime of wear exposed components.

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3. **Hydrogen embrittlement.** During cathodic protection released hydrogen from the cathodic reaction can be absorbed in the metal and reduce the mechanical strength of the metal. This is called Hydrogen Induced Stress Cracking (HISC) and has been a big challenge during the last years for high strength steel, stainless steel and nickel alloys used subsea. In connection with oil and gas production the well fluid can contain H<sub>2</sub>S. This can also cause hydrogen embrittlement (due to Sulphide Stress Corrosion) on metals. Production of and transport of H<sub>2</sub>-gas will be important in the future. A new big research project has been initiated in Norway to investigate how different materials react when exposed to H<sub>2</sub>-gas (HYLINE project). Special attention is paid to old infrastructure (e.g. pipeline systems) that can be converted to hydrogen gas transport pipelines.
4. **Materials for seawater applications.** Seawater is one of the most corrosive environments for passive metals like e.g. stainless steel and aluminium alloys. Different metals/alloys have different "safe operation windows". This has been a main area both related to research activities, failure investigations and consultancy work during the last 30 years.
5. **Corrosion Management.** Corrosion Management is a structured process/way to follow the status of an installation. This includes risk assessment, Risk Based Inspection (RBI) planning, inspection, corrosion and condition monitoring, actions to mitigate corrosion. A Corrosion Management system should be an important part of an overall Integrity Management system for an installation.
6. **Materials for the oil and gas industry**  
 The oil companies are continuously seeking for new material solutions to reduce the Life Cycle Cost and to improve safety. Our research focus is related to the behaviour of carbon steel, stainless steel and nickel alloys exposed to H<sub>2</sub>S, alloys for seawater and injection water (including raw seawater and produced water). Development of reliable test method for such applications are also an important topic.

### EDUCATION/TEACHING AND KNOWLEDGE SHARING

Beside research, education and transfer of corrosion and material related experiences to the industry are of major interest. This include e.g. i) teaching MSc students at own university (NTNU), ii) teaching/giving courses at universities outside Norway (Curtin University (Perth/Australia), Qatar University (Doha/Qatar), iii) University of Dar-Es-Salam (Dar-Es-Salam/Tanzania). Another important activity is related courses/training to the industry both in Norway and outside Norway. These courses are both industry specific (in-house training in a company) or public courses with attendees from several companies.

### SUPERVISION OF DOCTORAL STUDENTS

- Sten B. Axelsen:** Offshore coating maintenance – Coating Maintenance Management and Polysiloxane Topcoat Flaking. *Thesis defended in 2010.*
- Anna Smirnova:** Hydrogen diffusion in 13% Cr super martensitic stainless steel and API X70 pipeline steel. *Thesis defended in 2010.*
- Tore Castberg:** Wear resistance of ceramic materials used in chokes for oil and gas applications. *Thesis defended in June 2011.*
- Tarjei Rommetveit:** Using ultrasound techniques in order to characterize the technical state of inner pipe walls. *Thesis defended in September 2011.*
- Christian von der Ohe:** Surface coatings for hydraulic cylinder rods for marine tensioner systems – improved integrity through fundamental knowledge about the degradation mechanisms. *Thesis defended in November 2011.*
- Masoud Asgari:** Pulsed plasma surface treatment (PPST) – effect on hydrogen embrittlement and hydrogen absorption and diffusion. *Thesis defended in June 2013.*

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<b>Hedda N. Krogstad:</b>	Corrosion of Nickel-Aluminium Bronze in the presence of a Magnetic Field. <i>Defended her thesis in November 2017.</i>
<b>Gaute Stenerud;</b>	Hydrogen embrittlement of Ni-alloys. <i>Defended his thesis in September 2018.</i>
<b>Hans Husby;</b>	Evaluation of the hydrogen susceptibility in Ni alloyed high strength low alloy steel as a function of microstructure and hydrogen source. <i>Defended his thesis in August 2018</i>
<b>Mats Ingdal;</b>	Hydrogen uptake in metallic materials from cathodic protection and from corrosion in H <sub>2</sub> S environment. <i>2015 -2019.</i>
<b>Cristian Torres;</b>	Examination of the effect on Tungsten on the corrosion properties of 25% Cr super duplex stainless steel by advanced electrochemical techniques. <i>2016 – 2020. Defended his thesis in November 2020.</i>
<b>Ellen S. Skilbred:</b>	Corrosion, hydrogen uptake and environmental assisted cracking in steel armour in flexible pipes. <i>2018 – 2021</i>
<b>Erik Aas Koren:</b>	Safe Pipelines for Hydrogen Transport – HyLINE; Hydrogen uptake from H <sub>2</sub> -gas. <i>2019-2022</i>
<b>Öyku D. Senocak:</b>	Multiscale Hydrogen Embrittlement Assessment for Subsea Conditions (MHEAT). <i>2019-2022</i>

### SUPERVISION OF MSc STUDENTS

Supervised in the order of 90 MSc students during the period 2005 – 2019. Most of these students have worked on R&D projects defined and supported by the industry and/or are part of the PhD projects mentioned above.

### PATENT

- US patent no. 5158838 “Method for preventing formation of calcareous deposits on seawater battery cathodes”. Publication date 1992/10/27.


### SELECTED ACADEMIC AND PROFESSIONAL PUBLICATIONS:

#### **Peer-reviewed journals 2007 -**

1. Wang, Dong; Lu, Xu; Lin, Meichao; Wan, Di; Li, Zhiming; He, Jianying; Johnsen, Roy. Understanding the hydrogen effect on pop-in behavior of an equiatomic high-entropy alloy during in-situ nanoindentation. *Journal of Materials Science & Technology*, 2021
2. Adrian Lervik, John C. Walmsley, Lars Lodgaard, Calin D. Marioara, Roy Johnsen 5, Otto Lunder and Randi Holmestad, Stress Corrosion Cracking in an Extruded Cu-Free Al-Zn-Mg Alloy. *Metals*: 2020, 10, 1194; <https://doi.org/10.3390/met10091194>
3. Cristian Torres, Roy Johnsen, Mariano Iannuzzi, Use of the Critical Acidification Model to Estimate the Influence of W in the Localized Corrosion Resistance of 25Cr Super Duplex Stainless Steels. *Metals* 2020, 10, 1364. <http://dx.doi.org/10.3390/met10101364>.
4. Cristian Torres, Roy Johnsen, Mariano Iannuzzi, Crevice corrosion of solution annealed 25Cr duplex stainless steels: Effect of W on critical temperatures. *Corrosion Science* 178 (2021) 109053. <https://doi.org/10.1016/j.corsci.2020.109053>
5. Cristian Torres, María Sofia Hazarabedian, Zakaria Quadir, Roy Johnsen, Mariano Iannuzzi, The Role of Tungsten on the Phase Transformation Kinetics and its Correlation with the Localized Corrosion on Resistance of 25Cr Super Duplex Stainless Steels. *J. Electrochem. Soc.* 167 081510 (2020).
6. Adrian Lervik, John C. Walmsley, Lars Lodgaard, Calin D. Marioara, Roy Johnsen, Otto Lunder, Randi Holmestad, Stress Corrosion Cracking in an Extruded Cu-Free Al-Zn-Mg Alloy. *Metals* 2020, 10, 1194. <https://doi.org/10.3390/met10091194>.

7. Dong Wang, Xu Lu, Di Wan, Xiaofei Guo, Roy Johnsen, Effect of hydrogen on the embrittlement susceptibility of Fe–22Mn-0.6C TWIP steel revealed by in-situ tensile tests. *Material and Science Engineering A* 802 (2021) <https://doi.org/10.1016/j.msea.2020.140638>
8. M. Ingdal, R. Johnsen, D.A. Harrington, The akaike information criterion in weighted regression of immittance data, *Electrochimica Acta* (2019), doi: <https://doi.org/10.1016/j.electacta.2019.06.030>.
9. N. Kheradmand, B.R. Rogne, S. Dumoulin, Y. Deng, R. Johnsen, A. Barnoush, Small scale testing approach to reveal specific features of slip behaviour in BCC metals. *Acta Materialia* 174 (2019) 142-152. <https://doi.org/10.1016/j.actamat.2019.05.031>
10. H.Wilson, R.Johnsen, C.Torres, S.M.Hesjevik, Properties of TSA in ambient and elevated temperature. Accepted for publication in *Materials and Corrosion* August 2018. DOI: 10.1002/maco.201810385.
11. Roy Johnsen, Torstein Lange, Gaute Stenerud, Jim Stian Olsen, Environmentally assisted degradation of spinodal Copper alloy C72900. *Corrosion Science* 142 (2018) 45-55. <https://doi.org/10.1016/j.corsci.2018.06.031>
12. H. Husby, M. Iannuzzi, R. Johnsen, M. Kappes and A. Barnoush, Effect of nickel on hydrogen permeation in ferritic/pearlitic low alloy steels, *International Journal of Hydrogen Energy*; Vol. 43 (2018): 3845-61. <https://doi.org/10.1016/j.ijhydene.2017.12.174>
13. G. Stenerud, J. S. Olsen, R. Johnsen and S. Wenner, Effect of Different Microstructural Features on the Hydrogen Embrittlement Susceptibility of Alloy 718, *International Journal of Hydrogen Energy*, 43 (2018): p. 6765-6776. <https://doi.org/10.1016/j.ijhydene.2018.02.088>
14. G. Stenerud, R. Johnsen and J. S. Olsen, Hydrogen Stress Cracking and Crack Initiation in Precipitation Hardened Ni-Alloys, *Engineering Failure Analysis*, 89 (2018): p. 74-87.
15. Hajilou, Tarlan; Hope, Malin Sofie B.; Hossein Zavieh, Amin; Kheradmand, Nousha; Johnsen, Roy; Barnoush, Afrooz. In situ small-scale hydrogen embrittlement testing made easy: An electrolyte for preserving surface integrity at nano-scale during hydrogen charging. *International journal of hydrogen energy* 2018 ;Volum 43.(27) s. 12516-12529.
16. Husby, Hans; Wagstaff, Philip Haakon; Iannuzzi, Mariano; Johnsen, Roy; Kappes, Mariano A. Effect of Nickel on the Hydrogen Stress Cracking Resistance of Ferritic/Pearlitic Low Alloy Steels. *Corrosion* 2018 ;Volum 74.(7) s. 801-818
17. H.N.Krogstad, R.Johnsen, M.Coey, Effect of a time-dependent magnetic field on the corrosion of Ni-Al bronze. *Corrosion*, March 2018, Vol. 74, No. 3. pp. 337-349.
18. H.N.Krogstad, R.Johnsen, M.Coey, Effect of a uniform magnetic field on corrosion of Ni-Al bronze in 3.5wt% NaCl. *Corrosion*, Feb 2018, Vol. 74, No. 2. pp. 197-209.
19. H.Farhat, R.Johnsen, Hydrogen Sulfide Tube Failure in a Seawater Heat Exchanger. *Materials Performance/NACE International*, Vol. 56, No. 9, September 2017
20. M.Iannuzzi, A.Barnoush, R.Johnsen, Materials and corrosion trends in offshore and subsea oil & gas production. *Nature Partner Journal (npj) Materials Degradation* 1, Article number: 2 (2017) doi:10.1038/s41529-017-0003-4.
21. G.Stenerud, R.Johnsen, J.S.Olsen, J.He, A.Barnoush, Effect of hydrogen on dislocation nucleation in Alloy 718. *International Journal of Hydrogen Energy*, Volume 42, Issue 24 (2017), Pages 15933-15942.
22. H.N.Krogstad, R.Johnsen, Corrosion properties of nickel-aluminium bronze in natural seawater-Effect of galvanic coupling to UNS S31603. *Corrosion Science*, Vol. 121, June 2017, p. 43-56. <http://www.sciencedirect.com/science/article/pii/S0010938X16307491>
23. E. Haugan, M. Næss, C. Torres Rodriguez, R. Johnsen, and M. Iannuzzi, Effect of Tungsten on the Pitting and Crevice Corrosion Resistance of Type 25Cr Super Duplex Stainless Steels. *Corrosion*, Vol. 93, p. 53-67 (2017). doi: 10.5006/2185.
24. Kheradmand, Nousha; Johnsen, Roy; Olsen, Jim Stian; Barnoush, Afrooz. Effect of Hydrogen on the hardness of different phases in super duplex stainless steel. *International journal of hydrogen energy* 2016 ;Volum 41.(1) s. 704-712. <http://dx.doi.org/10.1016/j.ijhydene.2015.10.106>

25. T.Castberg, R.Johnsen, J.Berget; Corrosion and Subsequent Erosion of Hardmetals; Dependence of WC grain size and distribution, and binder composition. Accepted for publication in *Materials and Corrosion* 2014.
26. R.Johnsen, K.Andersen, J.S.Olsen: "Effect of austenite spacing on the susceptibility of hydrogen induced stress cracking for 25% Cr super duplex stainless steel", submitted for publication in the *Corrosion Journal*, manuscript no: CJ-1409-OA-1472, September 2014.
27. V.Olden, A.S.Haug, R.Johnsen, O.M.Akselsen: "Influence of plastic strain on the effective hydrogen diffusion and trapping in X70 pipeline steel", submitted to *Corrosion Science*, manuscript no: CORSCI-D-14-00020, January 2014.
28. N.Espallargas, R.Johnsen, C.Torres, A.I.Munoz; A new experimental technique for quantifying the galvanic coupling effects on stainless steel during tribocorrosion under equilibrium conditions. *Wear* 307 (2013), p. 190 – 197.
29. M.Asgari, A.Azar, A.Barnoush, R.Johnsen; Orientation Relationship and Texture of the Iron-Nitride Phase Constitutents in Pulsed Plasma Nitriding. *Metallurgical and Materials Transactions A* (2013)
30. T.S.Castberg, R.Johnsen, J.Berget; Dependence of WC grain size and distribution, and binder composition. *Wear* 300 (2013), p. 1-7.
31. M.Asgari, A.Barnoush, R.Johnsen, R.Hoel: Small-scale structural and mechanical characterization of the nitride layer in martensittic steel. *Tribology International* 61 (2013) 109-115.
32. M.Asgari, A.Barnoush, R.Johnsen, R.Hoel: Nanomechanical evaluation of the protectiveness of nitride layers against hydrogen embrittlement. *Corrosion Science* 62 (2012) 51-60.
33. A.Barnoush, M.Asgari, R.Johnsen, R.Hoel: Hydrogen Effect on nanomechanical Properties of the Nitrided Steel. *Metallurgical and Mateerials Transactions A*. Published on-line 17 October 2012.
34. A.Barnoush, M.Asgari, R.Johnsen: Resolving the hydrogen effect on dislocation nucleation and mobility by electrochemical nanoindentation. *Scripta Materialia* 66 (2012) 414-417.
35. M.Asgari, A.Barnoush, R.Johnsen, R.Hoel: Microstructural characterization of pulsed plasma nitride 316L stainless steel. *Materials Science and Engineering A* 529 (2011) 425-434
36. C.B.von der Ohe, R.Johnsen, N.Espallargas: A multi-degradation test rig for studying the synergy effects of tribocorrosion interacting with 4-point static and cyclic loading. *Wear* 271 (2011) 2979-2990.
37. T.Rommetveit, T.F.Johansen, R.Johnsen: Using a multi-layered transducer modell to estimatet he properties of paraffin wax deposited on steel. *Ultrasonics* 51 (2011) 85-93
38. S.B.Axelsen, O.Ø.Knudsen, R.Johnsen: Adhesion Properties of Polysiloxane Topcoats. *Corrosion Vol. 66, No. 12, p.125003-1 to 125003-9* (2010)
39. T.Rommetveit, T.F.Johansen, R.Johnsen: A Combined Approach for High-Resolution Corrosion Monitoring and Temperature Compensation Using Ultrasound, *IEEE Transaction on instrumentation and Measurement, Vol. 59, No. 11, November 2010*.
40. G.Ø.Lauvstad, R.Johnsen, I.Asbjørnsen, M.Bjurstrøm, C.G.Hjort; Resistance Towards Hydrogen Induced Stress Cracking of Hot Isostatically Pressed Duplex Stainless Steels under Cathodic Protection. *Corrosion Vol. 66, No. 11, p.115004-1 to 115004-13* (2010)
41. C.B.von der Ohe, R.Johnsen, N.Espallargas: Modeling the multi-degradation mechanisms of combined tribocorrosion interaction with static and cyclic loaded surfaces of passive metals exposed to seawater. *Wear* 269 (2010) 606-616.
42. S.B.Axelsen, O.Ø.Knudsen, R.Johnsen: Internal stress in Polysiloxane Topcoats. *Corrosion Vol. 66, No. 6, p.065006-1 to 065006-9* (2010)
43. S.B.Axelsen, O.Ø.Knudsen, R.Johnsen: Mechanical Properties of Polysiloxane Topcoats. *Corrosion Vol. 66, No. 6, p.065005-1 to 065005-8* (2010)
44. S.B.Axelsen, O.Ø.Knudsen, R.Johnsen: Protective Coatings Offshore: Introducing a Risk Based Maintenance Management System – Part 3: A Case Study, *Corrosion Vol. 66, No. 1, p.015003-1 to 015003-9* (2010)

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45. S.B.Axelsen, O.Ø.Knudsen, R.Johnsen: Protective Coatings Offshore: Introducing a Risk Based Maintenance Management System – Part 2: Framework Establishment *Corrosion Vol. 66, No. 1, p.015004-1 to 015004-10* (2010)
46. S.B.Axelsen, O.Ø.Knudsen, R.Johnsen: Protective Coatings Offshore: Introducing a Risk Based Maintenance Management System – Part 1 Risk Analysis Methodology, *Corrosion Vol. 65, No. 12, p.809-816* (2009)
47. V.Olden, C.Thaulow, E.Østby, T.Berstad, R.Johnsen: Influence of hydrogen from CP on the fracture susceptibility of 25% Cr duplex stainless steel – constant load SENT testing and FE modeling using hydrogen influenced cohesive zone elements. Accepted for publication in *Engineering Fracture Mechanics*, November 2008.
48. V. Olden, C. Thaulow, R. Johnsen, E. Østby: "Cohesive zone modeling of hydrogen-induced stress cracking in 25% Cr duplex stainless steel", *Scripta Materialia* 57, 2007, p. 615-618.
49. V. Olden, C. Thaulow, R. Johnsen, E. Østby, T. Berstad: "Application of hydrogen influenced cohesive laws in the prediction of hydrogen induced stress cracking in 25%Cr duplex stainless steel", *Engineering Fracture Mechanics*, 75(8), 2008, p.2333-2351.
50. V.Olden, C.Thaulow, R.Johnsen: Modeling of hydrogen diffusion and hydrogen induced cracking in supermartensitic and duplex stainless steels. *Materials & Design* 29 (2008), p. 1934-1948.
51. T.Okstad, Ø.Rannestad, R.Johnsen, K.Nicansioglu; *Corrosion*, Vol. 63, No. 9, p. 857-865 (2007)

#### **Book chapters:**

1. Corrosion behavior and protection of copper and aluminium alloys in seawater. EFC Publication no. 50, edited by D.Féron. Section 4: Experience with the use of copper alloys in seawater systems on the Norwegian Continental Shelf.
2. Tribocorrosion of passive metals. Edited by Dieter Landolt and Stefano Mischler. Woodhead Publishing in Materials, 2011. ISBN 978-1-84569-966-6. Chapter 16: Tribocorrosion in Marine Environments.

#### **International conference proceedings and meetings:**

1. R. Johnsen, L. C. Gjelseng, M. A. Heimsæther, A. Jernberg, A.H. Quale: "Influence of Manufacturing Process and Resulting Microstructure on HISC Susceptibility of 25Cr Duplex Stainless Steel Pipe". NACE International Corrosion 2019 Conference & Expo., March 24-28, 2019. Paper C2019-13410. Nashville (USA).
2. C. Torres, R. Johnsen, H. Østfold, M. Bernås, M. Iannuzzi: "Effect of W on Phase Transformation Kinetics and its Correlation with Localized Corrosion Resistance for UNS S39274". NACE International Corrosion 2019 Conference & Expo., March 24-28, 2019. Paper C2019-13233. Nashville (USA).
3. N. Stefansson, J. Dunn, E. Strand, R. Johnsen, M.A. Heimsæther: "Performance of High Strength UNS N08830 in Hydrogen Stress Crack Testing to Simulate Conditions Arising from Subsea Cathodic Protection." NACE International Corrosion 2019 Conference & Expo., March 24-28, 2019. Paper C2019-12989. Nashville (USA).
4. R. Johnsen, H. Olavesen, A. H. Zavieh, T. Erlien: "Effect of cathodic polarization on localized corrosion of 25Cr in seawater". NACE International Corrosion 2019 Conference & Expo., March 24-28, 2019. Paper C2019-12870. Nashville (USA).
5. M. Bernås, H. K. Østfold, C. Torres Rodríguez, A. Jernberg, I. Westermann, R. Johnsen, and M. Iannuzzi: "Effect of tungsten on the precipitation kinetics and localized corrosion resistance of super duplex stainless steels". NACE International Corrosion 2018 Conference & Expo., April 15-19, 2018. Paper C2018-11105. Phoenix (USA).
6. Kristian K. Wold, Roy Johnsen, Mariano Iannuzzi, Lars Årtun: Integrated cathodic protection (CP) sensor network". NACE International Corrosion 2018 Conference & Expo., April 15-19, 2018. Paper C2018-11109. Phoenix (USA).

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7. Audun Ryen, Roy Johnsen, Mariano Iannuzzi, Lars Årtun: "Cathodic protection by distributed sacrificial anodes – Performance at Elevated Temperature and in Mud". NACE International Corrosion 2018 Conference & Expo., April 15-19, 2018. Paper C2018-11106. Phoenix (USA).
8. Cristian Torres, Roy Johnsen, Mariano Kappes, Mariano Iannuzzi: Influence of tungsten on passivity breakdown and repassivation of 25Cr super duplex stainless steel". NACE International Corrosion 2018 Conference & Expo., April 15-19, 2018. Paper C2018-11105. Phoenix (USA).
9. R.Johnsen; Hydrogen Induced Stress Cracking of Stainless Steel in Seawater – what do we know and what is still unknown? Paper no. 72317. EUROCORR 2017, 20th International Corrosion Congress & Process Safety Congress 2017 Prague, Czech Republic. 3-7 September 2017.
10. R.Johnsen, O.Nese; "AA5083 and AA6082 Exposed to Seawater – Effect of Temperature and Potential on Corrosion Behaviour". NACE International Corrosion 2017 Conference & Expo., March 26-30, 2017. Paper C2017-8942. New Orleans (USA).
11. M.Iannuzzi, A.Jernberg, C.Lauritzen, I.Westermann, M.Bernås, R.Johnsen; "Effect of Microstructure on Corrosion Resistance of Super Duplex Stainless Steels". NACE International Corrosion 2017 Conference & Expo., March 26-30, 2017. Paper C2017-8923. New Orleans (USA).
12. G.Quale, R.Johnsen, L.Aartun, M.Iannuzzi; "Distributed Sacrificial Cathodic Protection – A new Cost Effective Solution to Prevent Corrosion on Subsea Structures". NACE International Corrosion 2017 Conference & Expo., March 26-30, 2017. Paper C2017-8941. New Orleans (USA).
13. H.N.Krogstad, E.S.Skilbred, R.Johnsen; «Corrosion Properties of Ni-Al Bronze and it's Main Alloying Elements – Effect of pH». NACE International Corrosion 2017 Conference & Expo., March 26-30, 2017. Paper C2017-9306. New Orleans (USA).
14. H.N.Krogstad, M.Coey, R.Johnsen; "Corrosion of Ni-Al Bronze and it's Main Alloying Elements – Effect of Magnetic Field. NACE International Corrosion 2017 Conference & Expo., March 26-30, 2017. Paper C2017-9298. New Orleans (USA).
15. H.Husby, A.Barnoush, M.Iannuzzi, M.Kappes, P.Rebak, R.Johnsen; Effect of Nickel in Solid Solution on the Hydrogen Embrittlement Suceptibility of Low Alloy Steels". Presented on the Research Symposia, NACE International Corrosion 2017 Conference & Expo., March 26-30, 2017. Paper C2017-10123. New Orleans (USA).
16. R.Johnsen, "Hydrogen Induced Stress Cracking of Duplex Stainless Steel under Cathodic Protection in Seawater – Historical overview and Lessons Learned". Materials Science and Technology, October 23-27, 2016, Salt Lake City USA.
17. R. Johnsen, T. Lange and J.S. Olsen, "Susceptibility to hydrogen embrittlement for C72900 exposed to H2S environment and under cathodic polarization in simulated seawater", EUROCORR 2016, paper no. 54572 (Montpellier, France: European Federation of Corrosion, September 11-15, 2016).
18. G. Stenerud, A. Barnoush, R. Johnsen and J.S. Olsen, «In Situ Electrochemical Nanoindentation of Alloy 718,» EUROCORR 2016, paper no. 65227 (Montpellier, France: European Federation of Corrosion, September 11-15, 2016).
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20. R.Johnsen, M.Næss, M.Iannuzzi; Effect of Tungsten on Pitting and Crevice Corrosion of type 25Cr Super Duplex Stainless Steel. NACE International Corrosion 2016 Conference & Expo; 2016-03-06 - 2016-03-10, Paper No. C2016-7308. Vancouver (Canada).
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