26.8.19 - נשלח ל

הקריה למחקר גרעיני – נגב
אגף משאבי אנוש

מרכז גרעיני, מדעי וטכנולוגי, מצטיין ומוביל

ת.ד. 9001 באר שבע מיקוד 84-190 | פקס: 08-6568808 | טלפון: 08-6568404

אישי

ו' אב תשע"ט
07 אוגוסט 2019

לכבוד:
פרופ' נועם וייסברוד
אוניברסיטת בן-גוריון
באר-שבע

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שלום רב,

הנדון: דר' עופרה קליין בן דוד – העלאה בדרגה

ועדת דירוג המחקר והפיתוח של הקריה למחקר גרעיני - נגב, שוקלת את קידומה של **דר' עופרה קליין בן דוד** לדרגה א'. דירוג המחקר והפיתוח כולל דרגות מ-ג' עד א+ (בהקבלה לדרגות מרצה עד פרופסור מן המניין בדירוג הסגל האקדמי הבכיר). דרגה א' מקבילה לדרגת פרופסור חבר. מעובד המקודם לדרגה זו נדרשת היכולת לבצע מחקר ופיתוח מדעי טכנולוגי ברמה המתאימה, היכולת לקחת חלק פעיל בגיבוש תכנית העבודה, להציע משימות מדעיות וטכניות, להתוות דרכי פתרון ושיטות עבודה ולהנחות ולבקר צוותים מקצועיים במחקר ופיתוח. בכלל זה יילקחו בחשבון הישגיו העצמאיים במחקר עיוני ושימושי של המועמד, כושרו להפעיל צוותים מקצועיים, רמת ביקורת עצמית וביקורת עמיתים, מידת יוזמתו המקצועית וכושרו לקיים ולפתח מגעים מקצועיים עם גורמי חוץ במערכת ומחוצה לה.

נכיר לך תודה אם תואיל להעריך את התאמתה של **דר' עופרה קליין בן דוד** לקריטריונים אלו. הקריה למחקר גרעיני היא מוסד מחקר ופיתוח שחלק מעבודות המו"פ המבוצעות בו הן פנימיות. על כן נבקשך לבסס את הערכתך בעיקר על איכות פרסומיה של המועמדת ולא על כמותם, ועל היכרותך (אם קיימת) עם עבודותיה ויכולותיה.

אנו מודעים לכך שכתיבת חוות הדעת כרוכה בהשקעת זמן ומאמץ מצדך ומודים לך מראש על שיתוף הפעולה.

חוות דעתך תשמר בסודיות ותשמש לצרכי הועדה בלבד.

ב ב ר כ ה,

דר' אוהד לוי
יו"ר ועדת דרוג

CURRICULUM VITAE

Name: Ofra Klein-BenDavid
Nationality: Israeli
Date of Birth: 16.7.1973
Phone: +972722340336
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Personal Address: Shaked 1320, Yeruham, Israel.
E-mail: ofrak1@gmail.com.

EDUCATION:

2008: SSEF scientific diamond course.

2007-2008: "Diamond Gemologists" degree of the GIA (Gemological institute of America).

2000-2006: **Ph.D**. in Geology at the Hebrew University, Jerusalem. Advisor: Prof. O. Navon. Thesis: "Diamonds microinclusions – their composition and implications for the mantle environment". The work included international collaboration with different science labs, advanced research using state-of-the-art spectroscopy and microscopy equipment and analytical equipment (FTIR, RAMAN, EPMA, TEM, SIMS, and FIB), presentation in international conferences and the publication of scientific articles in peer reviewed journals.

1997-1999: **M.Sc.** in Geology, the Hebrew University, Jerusalem, Israel. Advisors: Prof. A. Katz. and Prof. H. Gvirzman. Thesis: "Geochemistry and Geohydrology of Saline Springs along Lake Kinneret West Shore" The work included advanced research using analytical equipment (FIA, ICP-EOS), "wet" laboratory experience, presentation in conferences and the publication of scientific articles in peer reviewed journals.

1993-1996: **B.Sc.** in Geology, the Hebrew University, Jerusalem, Israel.

POSITIONS

2017-: **Adjunct professor**, environmental and civil engineering department, Vanderbilt University, Nashville, Tennessee.

2016-2017: **Sabbatical - Visiting scholar**, in the environmental and civil engineering department, Vanderbilt University, Nashville, Tennessee.

2016-: Adjunct senior lecturer, the department of geology and environmental science, Ben Gurion University

2009-: Researcher in the waste R&D unit NRCN, Israel.

2008-2009: Post-doctoral research fellow at the Hebrew university of Jerusalem. The work included advanced research techniques e.g. novel HPHT experimental rocking multi-anvil apparatus, ICP-MS laser ablation, and SEM imaging and analysis, presentation in international conferences and the publication of scientific articles in peer-reviewed journals.

2008-2009: Lecturer at Lifshiz College, Jerusalem. The work included course preparation, frontal teaching, field guidance and student work assessment in the following course: INTRODUCTION TO GEOLOGY.

2006-2008: "Marie Curie" post doctoral research fellow at Durham University, Durham, UK. The work includes international collaboration with a few science labs,

advanced research using state-of-the-art mass spectrometers and analytical equipment (TIMS-TRITON, ICP-MS- NEPTUN, ELEMENT, LA device), clean lab experience, presentation in international conferences and the publication of scientific articles in peer-reviewed journals.

2004-2005: Lecturer at Lifshiz College, Jerusalem. The work included course preparation, frontal teaching, field guidance and student work assessment in the following courses: INTRODUCTION TO GEOLOGY; ORE DEPOSITS ENERGY AND ENVIRONMENT.

2000- 2004: Teaching Assistant, Institute of Earth Sciences, Hebrew University of Jerusalem. The work included course preparation, frontal teaching, field guidance and student work assessment in the following courses: MINERALS, ROCKS, MAPS AND CROSSSECTIONS; GEOLOGICAL EXCURSION IN THE NEGEV; INTRODUCTION TO GEOLOGY FOR GEOGRAPHY STUDENTS.

2001-2002: Teaching Assistant, Dept. of Geography, Bar-Ilan University, Ramat-Gan, Israel. The work included course preparation, frontal teaching, field guidance and student work assessment in the course INTRODUCTION TO EARTH SCIENCES.

1999-2000: Geologist in "Amir Edelman - Geologist" firm, Jerusalem, Israel. The work included: estimation of mining reserves, estimation of ores quality, writing professional reports and work with governmental offices.

1998-1999: Research assistant, Dept. of Geography, Hebrew University of Jerusalem. The work included field work and sampling, laboratory analysis and data reprocessing.

1998-1999: Science teacher in "Geu'lim" and "Bet-Hakerm" elementary schools in Jerusalem. The work included frontal teaching and the introduction of scientific terms and approaches to an underprivileged population.

1997-1999: Teaching assistant, Institute of Earth Sciences, Hebrew University of Jerusalem. The work included course preparation, frontal teaching, field guidance and student work assessment in the following courses: EARTH MATERIALS; INTRODUCTION TO GEOLOGY FOR GEOGRAPY STUDENTS; INTRODUCTION TO GEOLOGY FORENVIRONMENTAL STUDIES STUDENTS, GROUND WATER GEOCHEMISRTRY; RAMON FIELD WORKSHOP AND KINNERET FIELD WORKSHOP.

1996: Science teacher in "Messada" elementary schools in Jerusalem. The work included frontal teaching and the introduction of scientific terms and approaches to an underprivileged population.

1994-1997: Research assistant, Institute of Earth Sciences, Hebrew University, Jerusalem, Israel. The work includes field work and sampling, laboratory analysis and data reprocessing.

1993-1996: Youth Seminar guide in "GESHER" educational affiliates. The work included guidance of immigrant youth and underprivileged youth, coordinating seminars and working with a group of guides.

ARMY SERVICE

1991-1993: soldier teacher and field guide in a high school in Zfat.

AWARDS AND SCHOLARSHIPS

2016-2017: Pazi fellow for "preferred sabbatical"

2010: Katzir fellowship for excellence in scientific research in governmental institutes.
2008: Most cited paper 2003-2007 award, Lithos, Elsevier
2006: Marie Curie Intra-European Post Doctoral Fellowships
2006: Minerva Post Doctoral Fellowships (granted and not used)
2002-2005: The Hebrew University excellent student scholarship.
2004: AGU student travel grant
2004: The Hebrew University student travel grant
2004: The Dicker-Sheraga Award, Institute of Earth Sciences, The Hebrew University of Jerusalem.
2004: Minerva short term travel grant
2003: The 8th international kimberlite conference travel grant
1997: The Ben Harry and Margaret award, Institute of Earth Sciences, The Hebrew University of Jerusalem.

GRANTS

2018-2021: IAEC-NNSA grant in the subject: Deep borehole disposal, With: Geological institute of Israel: Rani Calvo; NNSA: Sanida - Robert Mackinnon,Geoff Freeze; Laurence Livermore national laboratory (LLNL) – Frank Perry, Antoun Tarabay, Annie Kersting
2018-2021: IAEC-NNSA grant in the subject: Cements – carbonate rock interactions. With: NRCN – Gabriela Bar-Nes, Erez Boukobza; Vanderbilt university – David Kosson, John Ayers, Andrew Garrabrants, Kevin Brown; Sandia national Laboratory: Ed Matteo, Patric Brady, Carlos Jova-Colon
2017-2020: IAEC-NNSA grant in the subject: Colloid facilitated radionuclide transport in fractured carbonate rock: as integrated laboratory, field & numerical modeling study. With: with Prof. Noam Weisbroad at BGU. Sandia national laboratory: Annie Kersting, Mavrik Zavarin, Los Alamos: Paul Reimus.
2017-2020: IAEC-NNSA grant in the subject: "Mechanisms of subsurface flow and radionuclide transport". With: Geological institute of Israel: With: NRCN-Boukobza E; Geological institute - Rosensweig R. Los Alamos National laboratory - Bussod G., Hammond G., Reimus P., Stauffer P., Viswanathan H.
2017-2020: IAEC-IRSN grant in the subject: Carbonation of cement matrices for waste immobilization – experiments and modeling. With: NRCN – Gabriela Bar-Nas, Erez Boukobza; BGU – Alva Peled; IRSN – Alexander Dauzeres, Evelyne Baker, Emily L'hopital.
2017-2020: IAEC-CEA grant in the subject: Catalytic pyrolysis and plasma treatment of organic waste. With: NRCN – Avi Rave, Leonid Vardman, Gabriela Bar-Nes, Hadas Rave-Amit; CEA – F. Lamont, P. Charvin, F Rousset
2017-2020: Pazi grant: "Colloid facilitated radionuclide transport in fractured carbonate rock: as integrated laboratory, field & numerical modeling study". With: with Prof. Noam Weisbroad, BGU.
2015: Pazi travel grant – for a workshop on geological disposal in Tournemire France
2012-2016: Pazi grant: Lanthanide bearing colloid migration in fractured chalk media, with Prof. Noam Weisbroad at BGU

2013-2016: Ministry of energy, TAGAR grant: Interaction of dissolved spent fuel products with various rocks of Mt. Scopus group - experimental study. With Dr. Y. Har-Laven at Geological Survey of Israel.

STUDENTS SUPERVISION

2011: Co-Supervision of chemical engineering research project of Mrs. Y. Peled, Department of Chemical Engineering, Sami Shmoon College of engineering. Project title: Pyrolysis and Gasification of polyethylene, November 2011.

2013-2016: Co-Supervision of an MsC thesis by Ms. Emily Tran at the department of hydrology at the desert research center of BGU. Project title: Lanthanide bearing colloid migration in fractured chalk media.

2016-: Co-Supervision of a PhD thesis by Ms. Emily Tran at the department of hydrology at the desert research center of BGU. Project title: Radionuclide migration in fractured chalk media, from lab to field scale.

2017-: Co-Supervision of a MSc thesis by Ms. Matan Shainer at the department of Geology and the environment at BGU. Project title: carbonation impact in radionuclides retention properties in hardened cement paste in the context of nuclear facility disposal.

2018-: Co-Supervision of a PhD thesis by Or Granot at the department of Geology and the environment at BGU. Project title: Hydrogeological modeling and reactive transfer contaminant modeling of the unsaturated zone in Yamin platou.

LIST OF PUBLICATIONS

Articles in refereed journals

1. Tran E., Klein-BenDavid O., Teutsch N. and Weisbrod N. Influence of heteroaggregation processes between intrinsic colloids and carrier colloids on Cerium(III) mobility. Water research, vol 100, 1, 87-97, 2016.
2. Tran E., Klein-BenDavid O., Teutsch N. and Weisbrod N. Lanthanide migration through fractures in chalk – carbonatic colloids formation and mobility Environmental science and technology, 49(22), 13275-13282, 2015.
3. Klein-BenDavid, O., Pearson, D.G., Nowell, G.M., Ottley, C., McNeill, J.C.R., Logvinova, A. and Sobolev, N.V. The sources of diamond forming fluids – trace elements and Sr isotopic evidence. Geochimica et Cosmochimica Acta, Vol 125, 146-169. 2014.
4. Klein-BenDavid, O., Pettke, T. and Kessel, R. Chromium mobility in hydrous fluids at upper mantle conditions. Lithos, 125 (L -2): 122- l30. 2011.
5. Klein-BenDavid, O., Pearson, D.G., Nowell, G.M., Ottley, C., McNeill, J.C.R., Cartigny, P. Mixed fluid sources involved in diamond growth constrained by Sr-Nd-Pb-C-N isotopes and trace elements, Earth and Planetary Science Letters, 289, 123-133. 2010.
6. Klein-BenDavid, O., Logvinova, A., Schrauder, M., Spetius, Z., Weiss, Y., Hauri, E., Kaminsky, F.V., Sobolev, N.V., Navon, O. High-Mg carbonatitic

microinclusions in some Yakutian Diamonds- a new type of diamond-forming fluid, Lithos 112S, 648–659. 2009.
7. McNeill, J., Pearson, D.G., Klein-BenDavid, O.N., G.M., Ottley, C.J., Chinn, I. Quantitative analysis of trace element impurity levels in some gem-quality diamonds, Journal of Physics: Condensed Matter 21, 364207. 2009.
8. Weiss, Y., Kessel, R., Griffin, W.L., Kiflawi, I ,.Klein-BenDavid, O., Bell, D.R., Harris, J.W., Navon, O. A new model for the evolution of diamondforming fluids: Evidence from microinclusion-bearing diamonds from Kankan, Guinea, Lithos 112S, 660–674. 2009.
9. Klein-BenDavid O. and Pearson D. G. Origins of subcalcic garnets and their relation to diamond forming fluids—Case studies from Ekati (NWT-Canada) and Murowa (Zimbabwe). Geochimica et Cosmochimica Acta 73(3), 837-855. 2009.
10. Klein-BenDavid O., Wirth R., and Navon O. Micrometer-scale cavities in fibrous and cloudy diamonds – a glance into diamond dissolution events. Earth and planetary science letters 264(1-2) 89-103. 2007.
11. Klein-BenDavid O., Izraeli E. S., Hauri E., and Navon O. Fluid inclusions in diamonds from the Diavik mine, Canada and the evolution of diamond forming fluids. Geochimica et Cosmochimica Acta 71(3), 723-744. 2007.
12. Klein-BenDavid O., Wirth R., and Navon O. TEM imaging and analysis of microinclusions in diamonds: a close look at diamond-growing fluids. American Mineralogist 91, 353-365. 2006.
13. Klein-BenDavid O., Gvirtzman H., and Katz A. Geochemical identification of fresh water sources in brackish groundwater mixtures; the example of Lake Kinneret (Sea of Galilee), Israel. Chemical Geology 214(1-2), 45. 2005.
14. Klein-BenDavid O., Izraeli E. S., Hauri E., and Navon O. Mantle fluid evolution - a tale of one diamond. Lithos 77(1-4), 243-253. 2004
15. Klein-BenDavid O., Sass E., and Katz A. The evolution of marine evaporitic brines in inland basins: The Jordan-Dead Sea Rift valley. Geochimica et Cosmochimica Acta 68(8), 1763-1775. 2004.

Articles submitted

1. **Klein-Ben David O.,** Harlavan Y., Teutsch N., Levkov I. and Ganor J., "Interaction between spent fuel componantes and various rocks of Mt. Scopus Group: experimental study". Submitted to applied geochemistry.
2. Gabrila Bar-Nes, **Ofra Klein-BenDavid**, Laure Chomat, Nathalie Mace, Michal Arbel-Hadad and Stephane Poyet, "Sr immobilization in irradiated Portland cement paste exposed to carbonation", under revision, cement and concrete research.

Articles in refereed conference proceedings

1. Klein-BenDavid ,O., Peled, Y., Tavor, D., Ohayon ,Z., Elias, P., and Bar-Nes, G. Pyrolysis and gasification of HDPE in a batch reactor. Waste Management 2014, Ankona, Italy, May, 2014.

2. **Klein-BenDavid, O.**, Branch, J., Zhang, P., Bar-Nes, G., Arbel-Hadad, M., Delapp, R., and Kosson D. "Retention of Cr in metakaolin based geopolymeric materials under oxidation and carbonation". WM 2017 conference, March 5-9, 2017, Phoenix , Arizona, USA, Number 17453.
3. Raveh-Amit, H., **Klein-BenDavid, O.**, Atlas, G., Banano, N. and Bar-Nes, G., "contaminated solid waste treatment by catalytic pyrolysis of high density polyethylene over zeolites". The 16th international waste management and landfill symposium. Sardinia, Italy, 2-6 October 2017.
4. Raveh-Amit, H., Klein-BenDavid, O., Atlas, G., Banano, N. and Bar-Nes, G., "optimizing the pyrolysis of polypropylene for contaminated solid waste treatment". WM2018 conference, March 18-22, 2018. Phoenix, Arizona, USA.

Reports

16 proprietary reports

Thesis

Klein-BenDavid, O., (2006) The Composition of Diamond Micro-inclusions: Implications for the Formation of Natural Diamonds, PhD. Thesis, *The Hebrew University of Jerusalem*.

Klein, O., (1999) The Geochemical and Geohydrological Characteristics of the Saline Springs on the western Shore of lake Kinneret, M.Sc. Thesis, *The Hebrew University of Jerusalem* (In Hebrew).

Conference abstracts

Zhang, P., Branch, J., Garrabrants, A., Delapp, R., **Klein-BenDavid, O.**, and Kosson, D. "Effect of environmental relative humidity on the carbonation and oxidation of a cementitious waste form". WM 2018, conference, March 2018, Phoenix , Arizona, USA, Number 18448.

Raveh-Amit, H., **Klein-BenDavid, O.,** Atlas, G., Banano, N. and Bar-Nes, G., "optimizing the pyrolysis of polypropylene for contaminated solid waste treatment". WM2018 conference, March 18-22, 2018. Phoenix, Arizona, USA..

Tran E., **Klein-BenDavid O.,** Teutsch N. and Weisbrod N. "Uranium and cesium sorption to bentonite colloids in high salinity and carbonate rich environments: implications for radionuclide transport. AGU fall meeting, New Orleans, 11-15 December 2017.

Raveh-Amit, H., **Klein-BenDavid, O.,** Atlas, G., Banano, N. and Bar-Nes, G., "contaminated solid waste treatment by catalytic pyrolysis of high density polyethylene over zeolites". The 16th international waste management and landfill symposium. Sardinia, Italy, 2-6 October 2017.

Tran, E., **Klein-BenDavid, O.**, Teutsch, N. and Weisbrod, N. "Heteroaggregation between intrinsic colloids and carrier colloids: implication for Cerium (III) mobility

through fractured carbonate rocks", Migration 2017 conference, September 10-15 2017, Barcelona , Spain.

Klein-BenDavid, O., Branch, J., Zhang, P., Bar-Nes, G., Arbel-Hadad, M., Delapp, R., and Kosson D. "Retention of Cr in metakaolin based geopolymeric materials under oxidation and carbonation". Migration 2017 conference, September 10-15, 2017, Barcelona , Spain.

Zhang, P., Branch, J., Garrabrants, A., Delapp, R., **Klein-BenDavid, O.**, and Kosson, D. "The role of environmental conditions on the rate of carbonation and leaching from cementitious wasteform. 8th advances in cement-based materials (Cements 2017), 26-28 June 2017. Number 87.

Tran, E., **Klein-BenDavid, O.**, Teutsch, N. and Weisbrod, N. "Heteroaggregation between intrinsic colloids and carrier colloids: implication for Cerium (III) mobility through fractured carbonate rocks", EYAL 2017, 24-25 May 2017, Acre, Israel.

Tran, E., **Klein-BenDavid, O.**, Teutsch, N. and Weisbrod, N. "Heteroaggregation between intrinsic colloids and carrier colloids: implication for Cerium (III) mobility through fractured carbonate rocks", Israel Geological Society annual conference 2017, 21-22 March 2017, Mizpe Ramon, Israel.

Klein-BenDavid, O., Branch, J., Zhang, P., Bar-Nes, G., Arbel-Hadad, M., Delapp, R., and Kosson D. "Retention of Cr in metakaolin based geopolymeric materials under oxidation and carbonation". WM 2017 conference, March 5-9, 2017, Phoenix , Arizona, USA, Number 17453.

Raveh-Amit, H., **Klein-BenDavid, O.**, Atlas, G., Banano, N. and Bar-Nes, G., "Thermal and catalytic pyrolysis of high densiy polyethylenL lesssones learned on solid organic waste treatment". The 82nd meeting of the Israel chemical society, 13-14 February 2017. Tel Aviv, Israel.

Klein-Ben David O., Harlavan Y., Levkov I., Teutsch N. and Ganor J., "The interaction between spent fuel products and various rocks of Mt. Scopus Group: experimental study". The 28th Israeli Nuclear society's annual conference, April 2016, Tel Aviv.

Tran, E., **Klein-BenDavid, O.**, Teutsch, N. and Weisbrod, N. "intrinsic and carrier colloid-facilitated transport of lanthanides through discrete fractures in chalk" The Israeli Nuclear societies annual conference, April 2016, Tel Aviv.

Tran, E., **Klein-BenDavid, O.**, Teutsch, N. and Weisbrod, N. "intrinsic and carrier colloid-facilitated transport of lanthanides through discrete fractures in chalk" AGU, Sun Francisco, December 2015.

Klein-Ben David O., Harlavan Y., Levkov I., Teutsch N. and Ganor J., The potential of radionuclide pollution resulting from interaction between spent fuel products and various rocks of Mt. Scopus Group; experimental study, the department of geplogy and environmental studies, Annual meeting of the Israeli geological society, Kinnar, March 2015.

Tran, E., **Klein-BenDavid, O.,** Teutsch, N. and Weiabrod, N. Colloid-facilitated transport of lanthanides through fractures in chalk. Annual meeting of the Israeli geological society, Kinnar, March 2015.

Tran, E., **Klein-BenDavid, O.,** Teutsch, N. and Weiabrod, N. Colloid-facilitated transport of lanthanides through fractures in chalk. Annual meeting of the Israeli geological society, EGU, Vienna, April 2015.

Klein-BenDavid ,O., Peled, Y., Tavor, D., Ohayon ,Z., Elias, P., and Bar-Nes, G. (2014) Pyrolysis and gasification of HDPE in a batch reactor. the 28th annual symposium of the israeli section of the combustion institute, Tel Aviv, December, 2014.

Klein-BenDavid ,O., Peled, Y., Tavor, D., Ohayon ,Z., Elias, P., and Bar-Nes, G. (2014) Pyrolysis and gasification of HDPE in a batch reactor. Waste Management 2014, Ankona, Italy, May, 2014.

Avraham, D. and **Klein-Ben David, O**. (2014) Geological Disposal of Radioactive Waste. Nuclear association conference, Dead Sea, February 2014.

Avraham, D. and **Klein-Ben David, O**. (2014) Geological Disposal of Radioactive Waste. Annual meeting of the Israeli geological society, Dead Sea, Februar 2014.

Klein-Ben David O., Dody A. and Weiner D. (2014) In search for a geological disposal site for radioactive waste in Israel. Annual meeting of the Israeli geological society, Dead Sea, Februar 2014.

Peled Y., **O. Klein BenDavid**, D. Tavor, Ohayon, Z. and Bar-Nes, G. (2012) Pyrolysis and gasification of Solid, Organic, Low-Irvel Nuclear Waste: HDPE as a Case Study. Annual meeting of the Israeli nuclear association, Dead Sea, Israel, February 2012.

Klein-BenDavid O, Pettke T & Kessel R. (2011) Chromium Mobility in Hydrous Fluids at Upper Mantle Conditions. Goldschmidt conference, Prague, August 2011 .

Klein-BenDavid O, Pettke T & Kessel R. (2011) Chromium Mobility in Hydrous Fluids at Upper Mantle Conditions. Annual meeting of the Israeli geological society, March 2011.

Klein-BenDavid O, D. Pearson DG, Nowell GM, Ottley C (2009) KEYNOTE: Sr isotope and trace element systematics in diamond forming fluids –the relative roles of asthenosphere and lithosphere. MicroAnalysis Processes Time, Edinburgh, 31st August to the 2nd September 2009.

McNeill J., Pearson D.G., **Klein-BenDavid O**., Nowell G.M., Ottley C.J. and Chinn I. (2009) Trace Elements in Fibrous and Gem Diamonds with coupled Isotope Systematics for Diamonds of the Fibrous Growth Form. MicroAnalysis Processes Time, Edinburgh, 31st August to the 2nd September 2009.

McNeill J., Pearson D.G., **Klein-BenDavid O.**, Nowell G.M., Ottley C.J., Chinn I. (2009) Quantitative analysis of trace element concentrations in some gem-quality diamonds. 60th DeBeer diamond conference, Warwick, Extended Abstracts, No 12.

Klein-BenDavid O, Pearson DG, Nowell GM, Ottley C & Cantigny P (2009). Origins of diamond forming fluids – Constraints from a coupled Sr-Nd-Pb isotope and trace element approach . Annual meeting of the Israeli geological society, Kfar Blum, Israel.

Navon O., Weiss Y., **Klein-BenDavid O**., and Bell D. R. (2009) End-member fluids for diamond formation and their possible sources. *EGU, Vienna Austria.*

Pearson, D.G., Nowell, G.M., **Klein-BenDavid, O**., Karsgaard, B.A. and Irving, A.J. (2008) Keynote: Isotopic constraints on the source regions of alkaline volcanics. Goldschmidt conference, Vancouver Canada.

Tomlinson E, Muller W, Hinton R, **Klein BenDavid O**, Pearson G & Harris J. (2008) Metasomatic processes recorded in fibrous diamonds. Goldschmidt conference, Vancouver Canada.

Klein-BenDavid O, Pearson DG, Nowell GM, Ottley C & Cantigny P (2008). Keynote: Origins of Diamond Forming Fluids – Constraints from a Coupled Sr-Nd-Pb Isotope and Trace Element Approach. Goldschmidt conference, Vancouver Canada.

Klein-BenDavid, O., Graham, D. G., Nowell, G. M., Ottley, C. and Cantigny, P. (2008) Origins of diamond forming fluids – constraints from a coupled Sr-Nd-Pb isotope and trace element approach. DeBeers diamond conference, Oxford, UK.

Klein-BenDavid, O.; Wirth, R.; Navon, O. Micrometer-scale cavities in fibrous and cloudy diamonds – a glance into diamond dissolution events. 9th international kimberlite conference, Extended abstracts, Frankfurt, Germany, 9IKC-A-00119

Klein-BenDavid, O.; Pearson, D.G.; Cantigny, P.; Nowell, G.M. Origins of diamond forming fluids – constraints from a coupled Sr-Nd isotope and trace element approach. 9th international kimberlite conference, Extended abstract, Frankfurt, Germany, 9IKC-A-00118

Navon, **O**; **Klein-BenDavid, O**; Logvinova, A; Sobolev, NV; Schrauder, M; Kaminsky, FV; Spetius, Z. Yakutian Diamond-forming Fluids and the Evolution of Carbonatitic high-density Fluids. 9th international kimberlite conference, Extended abstract, Frankfurt, Germany, 9IKC-A-00120

Navon, **O**; **Klein-BenDavid, O**; Weiss, Y. Diamond-forming Fluids: their Origin and Evolution. 9th international kimberlite conference, Extended abstract, Frankfurt, Germany, 9IKC-A-00121

Pearson, D.G.; **Klein-BenDavid, O.** (2008) Origins of subcalcic garnets and their relation to diamond forming fluids – case studies from Ekati (NWT-Canada) and Murowa (Zimbabwe). 9th international kimberlite conference, Extended abstract, Frankfurt, Germany, 9IKC-A-00150

Logvinova, A. M.; **Klein-BenDavid, O**.; Wirth, R.; Pearson, D. G.; Navon, O.; Pokhilenko, N. P.; Sobolev, N. V. (2008). Diamond forming fluids from Snap Lake – a comprehensive study. 9th international kimberlite conference, Extended abstract, Frankfurt, Germany, 9IKC-A-00379.

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Keynote lecture: in Micro-Analysis, Processes, Time (MAPT) conference Edinburgh, 31st August to the 2nd September 2009.

Keynote lecture: Klein-BenDavid O, Pearson DG, Nowell GM, Ottley C & Cantigny P., Origins of Diamond Forming Fluids – Constraints from a Coupled Sr-Nd-Pb Isotope and Trace Element Approach. Goldschmidt conference, Vancouver Canada. July 13 – 18, 2008.

Fluid inclusions in diamonds - implications for mantle fluid evolution. Geological survey of Israeli, Israel, June, 2008.

Fluid inclusions in diamonds - implications for mantle fluid evolution. Department of Earth sciences, Ben Gurion University, Israel, June, 2008.

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Sr Isotopes and trace element patterns in sub-calcic garnets: a perspective on diamond-bearing fluids?" GeoForschungsZentrum Potsdam (GFZ) Germany, January 2007.

Geochemical identification of the fresh water component diluting the Tabgha and Fuliya spring, Annual meeting of The Israeli association of water resources, June 2004.

Micro-inclusions in diamonds, their composition and implication in mantle environment, Geological survey of Israel, June 2004.

Fluid inclusions in diamonds - implications for mantle fluid evolution, GeoForschungsZentrum Potsdam, October 2003.

Geochemical Identification of Fresh Water sources in brackish groundwater mixtures; the example of Lake Kinneret (Sea of Galilee), Haifa University, May 2001.

Brine mixing during the evolution of Ca - chloride brines in the Jordan – Dead Sea Rift valley. The Jerald Friedman annual conference, The Hebrew university of Jerusalem, May 2002.