

**List of National Publication
Chemistry Education Study Program 2020**

No	Year	Publication's Title	Authors	Journal's Name	Kind of Publications	Link Access
1	2020	The Effect of Learning Models and Emotional Intelligence on Student Learning Outcomes	Prof. Dr. Sudding, M.S.	Chemistry Education Review (CER)	National Journal	https://ojs.unm.ac.id/CER/article/view/13768
2	2020	Comparison of Critical Thinking Ability and Learning Outcomes of Class XI Students who are Taught Using Problem-Based Learning Models and Direct Learning	Prof. Dr. Sudding, M.S.	Chemistry Education Review (CER)	National Journal	https://ojs.unm.ac.id/CER/article/view/19116
3	2020	Isolation and Optimization of Endophytic Bacteria from Roots of Karst Area Ecosystems Producing Protease Enzymes	Prof. Dr. Pince Salempa, M.Si.	The Journal of Research on the Lepidoptera	National Journal	http://eprints.unm.ac.id/17668/
4	2020	Synthesis and Characterization of Gold Nanoparticles Using Trisodium Citrate as a Reductant	Prof. Dr. Pince Salempa, M.Si.	Jambura Journal of Chemistry	National Journal	https://ejurnal.ung.ac.id/index.php/jjc/article/view/5024
5	2020	Preparation of investigation-based Student Activity Sheets (LKPD) for teachers of Parangtambung II State Elementary School, Makassar City	Prof. Dr. Muhammad Danial, M.Si.	National Seminar Community Service	Proceeding of National Seminar Research and Community Service	https://ojs.unm.ac.id/semnaslpm/article/view/11888
6	2020	Development of Guided Inquiry-Based Science Learning Devices	Prof. Dr. Muhammad Danial, M.Si.	Chemistry Education Review (CER)	National Journal	https://ojs.unm.ac.id/CER/article/view/13764
7	2020	Development of Student Worksheets (LKPD) Based on High Order Thinking Skill (HOTS) on Periodic Table of Elements Material	Prof. Dr. Muhammad Danial, M.Si.	Chemistry Education Review (CER)	National Journal	http://eprints.unm.ac.id/17064/
8	2020	The Effect of Natural Material-Based Practicum through the Discovery Learning Model on Students' Motivation and Chemistry Learning Outcomes	Prof. Dr. Muhammad Danial, M.Si.	Chemistry Education Review (CER)	National Journal	https://ojs.unm.ac.id/CER/article/view/13765

9	2020	Development of Discovery Learning Based Middle School Science Learning Devices Oriented to Problem Solving Ability and Student Learning Outcomes	Prof. Dr. Muhammad Danial, M.Si.	Chemistry Education Review (CER)	National Journal	https://ojs.unm.ac.id/CER/article/view/13770/0
10	2020	Development of Discovery Learning-Oriented Middle School Science Learning Devices to Improve Critical Thinking Ability and Student Learning Outcomes	Prof. Dr. Muhammad Danial, M.Si.	Chemistry Education Review (CER)	National Journal	https://ojs.unm.ac.id/CER/article/view/13771/0
11	2020	Development of Brain Scramble Card Game Media on Chemical Bonding Material to Improve Reflective Cognitive Style and Learning Outcomes	Prof. Dr. Muhammad Danial, M.Si.	Chemistry Education Review (CER)	National Journal	https://ojs.unm.ac.id/CER/article/view/19115
12	2020	The effect of edmodo social network-based blended learning in the discovery learning model on students' learning outcomes (study on the subject material of buffer solution)	Prof. Dr. Muhammad Danial, M.Si.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/14839
13	2020	Strengthening Elementary School Teacher Competence in Developing HOTS-Based Cognitive Test Instruments	Prof. Dr. Muhammad Danial, M.Si.	Pengabdi	National Journal	https://ojs.unm.ac.id/pengabdi/article/view/15773
14	2020	The effect of using scrapbook in the problem-based learning model on the learning outcomes of students in class xi ipa sman 14 gowa (study on the subject material of the colloid system)	Prof. Dr. Muhammad Danial, M.Si.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/17988
15	2020	Employee Performance Assessment Using the Behaviorally Anchored Rating Scales Method at Ud. Barokah Puri Mojokerto	Prof. Dr. Muhammad Danial, M.Si.	Brawijaya	National Journal	http://repository.ub.ac.id/id/eprint/181679/

16	2020	Analysis of Creative Thinking Ability of Class X3 Students of SMA Negeri 1 Watang Pulu in Problem-Based Learning on the Subject Material of Redox Reactions	Drs. Alimin, M.S.	Chemedu	National Journal	https://ojs.unm.ac.id/ChemEdu/article/view/17532
17	2020	The influence of mind mapping at the end of the discovery learning model on learning outcomes of students in class xi ipa of sman 3 makassar (study on the subject material of buffer solution)	Drs. Alimin, M.S.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/14840
18	2020	The Effect of Adding PVA on the Size of Silver Nanoparticles Synthesized Using Bioreductors of Soursop (<i>Annona muricata</i> L.) Leaf Extract	Dra. Sumiati Side, M.Si.	Sainsmat	National Journal	https://ojs.unm.ac.id/sainsmat/article/view/14186
19	2020	Increasing rice production through organic fertilizer application as an effort to improve the welfare of farming group in congko village, soppeng district	Dra. Sumiati Side, M.Si.	Jurnal Masyarakat Mandiri (JMM)	National Journal	https://journal.ummat.ac.id/index.php/jmm/article/view/3146
20	2020	Analysis of Metal Oxide Content of South Sulawesi Natural Zeolite Activated Hydrochloric Acid	Dra. Sumiati Side, M.Si.	Sainsmat	National Journal	https://ojs.unm.ac.id/sainsmat/article/view/15384
21	2020	The effect of the use of flash-based animation media in the discovery learning model on the learning outcomes of students in class x ipa students at sma negeri 1 pamboang	Dra. Ramdani, M.Si.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/14836
22	2020	The effect of using the quizizz application in team games tournament type cooperative learning model on learning outcomes students in class xi mia sman 1 gowa (study of subject materials buffer solution)	Dr. Taty Sulastry, M.Si.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/14845

23	2020	Development of Performance Assessment Toolkit for Acid-Base Titration Practicum at YKN Baubau Health Vocational School	Drs. Muhammad Jasri Djangi, M.Si.	Chemedu	National Journal	<a href="https://ojs.unm.ac.id/Che
mEdu/article/view/17533">https://ojs.unm.ac.id/Che mEdu/article/view/17533
24	2020	The Effect of the Structure Exercise Method (SEM) in the Problem Based Learning (PBL) Model on the Problem Solving Ability of Class XI IPA Students at SMA Negeri 2 Sengkang	Drs. Muh Yunus, M.Si.	Chemedu	National Journal	<a href="https://ojs.unm.ac.id/Che
mEdu/article/view/17333">https://ojs.unm.ac.id/Che mEdu/article/view/17333
25	2020	Application of the POE (Prediction, Observation, and Explanation) Learning Model to Increase the Motivation of Class XI MS6 Students at SMAN 3 Lau Maros (Study on Acid-Base Subjects)	Dr. Halimah Husain, M.Si.	Chemedu	National Journal	<a href="https://ojs.unm.ac.id/Che
mEdu/article/view/17527">https://ojs.unm.ac.id/Che mEdu/article/view/17527
26	2020	Differences in learning outcomes students in class xi mia sman 9 gowa taught with problem based learning and discovery learning models (study on acid base subjects)	Dr. Halimah Husain, M.Si.	Chemica	National Journal	<a href="https://ojs.unm.ac.id/che
mica/article/view/14834">https://ojs.unm.ac.id/che mica/article/view/14834
27	2020	The influence of giving quiz at the beginning of the meeting in the discovery learning model on the learning outcomes of students in class xi mia sman 10 luwu (study on the subject materials of buffer solution)	Dr. Halimah Husain, M.Si.	Chemica	National Journal	<a href="https://ojs.unm.ac.id/che
mica/article/view/17990">https://ojs.unm.ac.id/che mica/article/view/17990
28	2020	The effect of flipbook-based e-module media on problem-based learning (pbl) model on motivation and learning outcomes of students in class xii students of sma negeri 1 wajo (study on the subject materials of solution colligative properties)	Dr. Muhammad Anwar, M.Si.	Chemica	National Journal	<a href="https://ojs.unm.ac.id/che
mica/article/view/17986">https://ojs.unm.ac.id/che mica/article/view/17986

29	2020	The Influence of Mind Mapping Recording Techniques on the Learning Cycle 5E Learning Model on Learning Outcomes of Class X Students of SMA Negeri 1 Kajuara, Bone Regency	Dr. Muhammad Anwar, M.Si.	Chemedu	National Journal	<a href="https://ojs.unm.ac.id/Che
mEdu/article/view/17524">https://ojs.unm.ac.id/Che mEdu/article/view/17524
30	2020	Relationship between Chemistry Teacher Performance and Personality and Student Learning Interests	Dr. Army Auliah, M.Si.	Chemistry Education Review (CER)	National Journal	<a href="https://ojs.unm.ac.id/CER/
article/view/19123">https://ojs.unm.ac.id/CER/ article/view/19123
31	2020	Analysis of Creative Thinking Ability of Class X3 Students of SMA Negeri 1 Watang Pulu in Problem-Based Learning on the Subject Material of Redox Reactions	Dr. Army Auliah, M.Si.	Chemedu	National Journal	<a href="https://ojs.unm.ac.id/Che
mEdu/article/view/17532">https://ojs.unm.ac.id/Che mEdu/article/view/17532
32	2020	The influence of mind mapping at the end of the discovery learning model on learning outcomes of students in class xi ipa of SMAN 3 makassar (study on the subject material of buffer solution)	Dr. Army Auliah, M.Si.	Chemica	National Journal	<a href="https://ojs.unm.ac.id/che
mica/article/view/14840">https://ojs.unm.ac.id/che mica/article/view/14840
33	2020	Analysis of the Effect of Discovery Learning on Students' Interests and Learning Outcomes	Dr. Sugiarti, M.Si.	Chemistry Education Review (CER)	National Journal	<a href="https://ojs.unm.ac.id/CER/
article/view/13763">https://ojs.unm.ac.id/CER/ article/view/13763
34	2020	Development of Student Worksheets (LKS) Based on Guided Inquiry on the Topic of Reaction Rates for Class XI IPA SMA Students	Dr. Sugiarti, M.Si.	Chemedu	National Journal	<a href="https://ojs.unm.ac.id/Che
mEdu/article/view/17531">https://ojs.unm.ac.id/Che mEdu/article/view/17531
35	2020	Synthesis of manganese oxide nanoparticles using sol gel method and catalytic activity test on rhodamin b dye degradation	Dr. Netti Herawati, S.Pd., M.Si.	Chemica	National Journal	<a href="https://ojs.unm.ac.id/che
mica/article/view/17989">https://ojs.unm.ac.id/che mica/article/view/17989
36	2020	Community Service training for the manufacture of natural-based handsanizers for women of citra mas complex	Sitti Faika, M.Sc., Ph.D., Apt.	National Seminar Research and Community Service	Proceeding of National Seminar Research and Community Service	<a href="https://ojs.unm.ac.id/sem
naslpm/article/view/1755
9">https://ojs.unm.ac.id/sem naslpm/article/view/1755 9

37	2020	The effect of the discovery learning model on the skills of making concept map and learning outcomes of students of sma negeri 8 makassar (study on the subject material of buffer solution)	Maryono, S.Si., MM., Apt.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/14844
38	2020	Improving the Professionalism of Teachers of SMAN 5 Gowa Through Training in Preparing Hots-Based Assessments (Higher Order Thinking Skills)	Dr. Jusniar, S.Pd., M.Pd.	Pengabdi	National Journal	https://ojs.unm.ac.id/pengabdi/article/view/15726
39	2020	Development of a Scientific Approach Differentiation Inquiry Learning Model to Improve Scientific Thinking Skills of High School Students	Dr. Jusniar, S.Pd., M.Pd.	Chemedu	National Journal	https://ojs.unm.ac.id/ChemEdu/article/view/17528
40	2020	Analysis of Critical Thinking Ability Based on Gender of Xi Mia Class SMA Negeri 1 Maiwa Through the Inquiry Learning Model (Study on the Main Material of Chemical Equilibrium)	Dr. Jusniar, S.Pd., M.Pd.	Chemedu	National Journal	https://ojs.unm.ac.id/ChemEdu/article/view/17530
41	2020	Pyrolysis of Polypropylene Plastic Waste: Overview of Effect of Temperature on Pyrolysis Reactors in Capacity of 1 Kg/batch	Dr. Eda Lolo Allo, S.Pd, M.Pd.	Journal Dynamic Saint	National Journal	https://journals.ukitoraja.ac.id/index.php/dynamicsaint/article/view/962
42	2020	Effectiveness of beluntas leaf extract (pluchea indica less) as a corrosion inhibitor in carbon steel materials in 3.5% nacl media	Diana Eka Pratiwi, S.Si., M.Si.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/14843
43	2020	The effect of addition of polyvinyl alcohol (pva) on the characteristics of silver nanoparticles resulted by synthesis using moringa oleifera leaf extract bioreductor	Diana Eka Pratiwi, S.Si., M.Si.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/17987
44	2020	Improving the Professionalism of Teachers of SMAN 5 Gowa Through	Ahmad Fudhail Majid, S.Pd., M.Si.	Pengabdi	National Journal	https://ojs.unm.ac.id/pengabdi/article/view/15726

		Training in Preparing Hots-Based Assessments (Higher Order Thinking Skills)				
45	2020	Feasibility of interactive e-books as e-learning teaching materials on electrochemical materials developed through 4s tmd	Munawwarah, S.Pd., M.Pd.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/30442
46	2020	Isolation and characterization of bromelather enzyme from the head and flesh of pineapple (ananas comosus)	Nita Magfirah Ilyas, S.Si., M.Si.	Chemica	National Journal	https://ojs.unm.ac.id/chemica/article/view/17983