

## ABSTRAK

Skripsi dengan judul “*Profil Kemampuan Literasi Sains siswa SMAN 1 Ngunut pada Materi Sistem Koloid*” ini ditulis oleh Moch. Efinnudin Zukhri, NIM. 12212183017, Program Studi Tadris Kimia, Fakultas Tarbiyah dan Ilmu Keguruan, Universitas Islam Negeri Sayyid Ali Rahmatullah Tulungagung, Pembimbing Tutik Sri Wahyuni, M. Pd.

**Kata Kunci** : Literasi sains, Kemampuan, Sistem koloid

Kimia mata pelajaran di SMA/MA yang mempelajari tentang komposisi, struktur, sifat dan perubahan zat yang melibatkan keterampilan serta penalaran. Literasi sains (kimia) diperlukan agar siswa mampu menganalisis pertanyaan secara ilmiah untuk memperoleh pengetahuan baru. Literasi sains adalah suatu potensi atau kemampuan yang dimiliki seseorang dalam menggunakan ilmu sains, menyelidiki dan mengidentifikasi suatu fenomena alam. Namun, pada faktanya kemampuan literasi sains siswa di Indonesia tergolong rendah. Materi sistem koloid juga memiliki hubungan dengan aspek literasi sains. Tujuan dari penelitian ini adalah untuk mengetahui kemampuan literasi sains siswa SMAN 1 Ngunut kelas XII pada materi sistem koloid.

Metode penelitian menggunakan pendekatan kuantitatif dengan jenis penelitian deskriptif. Sumber data dalam penelitian ini adalah 27 siswa kelas XII MIPA 6 di SMAN 1 Ngunut. Dilakukan pemberian instrumen tes berupa soal uraian (*essay*) sebanyak 10 butir soal. Instrumen divalidasi oleh 2 dosen ahli dan 1 guru kimia, mendapatkan hasil validitas 94,1%. Reliabilitas soal diukur menggunakan *alpha cronbach* sebesar 0,771 dengan kategori tinggi. Jawaban dianalisis dan dikategorikan berdasarkan kriteria literasi sains.

Hasil dari penelitian menunjukkan bahwa persentase rata-rata kemampuan literasi sains siswa SMAN 1 Ngunut sebesar 41,00% termasuk dalam kategori rendah. Sisanya mendapatkan hasil 4,00% kategori sangat tinggi, 33,00% kategori sedang, 22,00% kategori sangat rendah. Selain itu, jawaban siswa juga dapat dikelompokkan berdasarkan level literasi sains dari PISA sebagai berikut (1) level *scientific literacy* siswa masih belum paham akan ilmu sains dengan persentase 8,15%, (2) level *nominal scientific literacy* siswa mampu untuk mengenali suatu konsep sains dengan persentase 38,15%, (3) level *functional scientific literacy* kurangnya pemahaman siswa untuk mengeksplor ilmu sains dengan pengetahuan umum, level dengan persentase tertinggi 44,45%, (4) ditemukan siswa yang mampu mengaitkan ilmu sains dengan pengetahuan umum atau fenomena alam kehidupan sehari-hari yang mana pada level ini disebut *conceptual scientific literacy* dengan persentase 9,25%.

## ABSTRACT

thesis with the title " *Profile of Scientific Literacy Ability of SMAN 1 Ngunut Students on Colloidal System Material* " was written by Moch. Efinnudin Zuhri, NIM. 12212183017, Tadris Chemistry Study Program, Faculty of Tarbiyah and Teacher Training, Sayyid Ali Rahmatullah State Islamic University Tulungagung, Tutik Sri Wahyuni Supervisor, M. Pd.

**Keywords** : Scientific Literacy, Ability, Colloidal System

Chemistry is a science that seeks answers to the what, why, and how of natural phenomena related to the composition, structure, and properties, changes, dynamics, and energetics of matter. Therefore, chemistry subjects in SMA / MA learn everything about substances that involve skills and reasoning . The colloidal system material also has a relationship with the assessment of scientific literacy. Where scientific literacy is a potential or ability that a person has in using science to science, investigating and identifying a written or spoken in the form of words, and being able to make conclusions according to actual evidence on the environment through human activities, both social society itself . The purpose of this study was to determine the scientific literacy ability of the students of SMAN 1 Ngunut class XII on colloidal system material.

The research method uses a descriptive quantitative approach. Sources of data in this study were 27 students of class XII MIPA 6 at SMAN 1 Ngunut. The test instrument is given in the form of a description ( *essay* ) question. The instrument was validated by 2 expert lecturers and 1 chemistry educator, with 94.1%. The reliability of the questions was measured using *cronbach's alpha* of 0.771 with a high category. The test instrument consists of 10 questions. Answers were analyzed and categorized based on scientific literacy criteria.

The results showed that the percentage level of students' scientific literacy skills was of various kinds, namely 4% very high criteria, 33% moderate criteria, 22% low criteria, 41% very low criteria. There are 4 levels in the final score of students, namely (1) there are students who are not familiar with the concept of science, this level is called *scientific literacy* , (2) students understand science knowledge but still have misconceptions, it can be said that the *nominal level of scientific literacy is*, (3) level *functional scientific literacy* lacks the understanding of students to explore science with general knowledge, (4) it is found that students are able to relate science to general knowledge or natural phenomena of everyday life which at this level is called *conceptual scientific literacy*.

