

# Colin F. McClare papers

Colin F. McClare papers  
1960s-1970s



## Title Statement

Colin F. McClare papers Guide to the Colin F. McClare papers C0116

**Subtitle:** Colin F. McClare papers

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## Publication Statement

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## Profile Description

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## Descriptive Summary

**Unit ID**

C0116

**Unit ID**

/repositories/2/resources/378

**Unit Date**

1960s-1970s

**Language**

English

**Abstract**

This collection contains revisions of a manuscript on biophysics as well as correspondence with George Mason University biology professor Harold Morowitz.

**Creator**

McClare, Colin William Fraser, 1937-1977

**Extent**

1 Linear Feet 2 boxes

**Repository**

George Mason University. Libraries. Special Collections Research Center

## Administrative Information

**Access Restrictions**

There are no access restrictions.

**Use Restrictions**

The copyright and related rights status of this collection have not been evaluated (See <http://rightsstatements.org/vocab/CNE/1.0/>)

**Acquisition Information**

The donor is unknown.

**Processing Information**

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**Preferred Citation**

Colin F. McClare papers, C0116, Special Collections Research Center, George Mason University Libraries.

## Biographical Information

Colin F. McClare was a biophysics professor who spent much of his academic career trying to devise a new theory to explain biochemical processes. As a student, he attended Felsted School and Emmanuel College, Cambridge, where he studied chemistry. As a Medical Research Council student in 1958-1961, McClare conducted research on free radicals at Cambridge. As a Beit Fellow in 1961-1963, he researched energy transfer in nucleic acids. McClare was awarded a Ph.D. in 1962, after which he became a lecturer in Biophysics at King's College, London in 1963-1977. McClare's research in bioenergetics and the problems of muscle contraction led him to conclude that classical thermodynamics was inadequate to explain biological processes and that the application of the Second Law of Thermodynamics to biological machines required the introduction of time scales. His ideas were not generally accepted and, although he wrote extensively on the subject, his papers were denied publication until four controversial papers appeared in the *Journal of Theoretical Biology* and *Nature*, 1971-1972. The essays generated vigorous debates among scientists all over the world, but ultimately, McClare's unorthodox views failed to gain the approval of established scientific opinion.

## Scope and Content

This collection contains revisions of a manuscript on biophysics as well as correspondence with George Mason University biology professor Harold Morowitz.

## Related Material

The Special Collections Research Center also holds the [Harold Morowitz papers](#).

## Keywords

Biophysics

Manuscripts

Correspondence

George Mason University--Faculty

McClare, Colin William Fraser, 1937-1977  
Morowitz, Harold J.

## Arrangement

Organized by subject and date.

## Description of Subordinate Components

### **Colin McClare papers**

**Unit ID** /repositories/2/archival\_objects/99280

**Unit Date** 1960s-1970s

#### **Correspondence: McClare/Morowitz**

**Unit ID** /repositories/2/archival\_objects/99281

**Unit Date** 1972, 1974, 1976

**Mixed Materials** 1 (box)

**Container** 1 (folder)

**Scope and Contents note**

#### **Correspondence: Morowitz/McClare, G./Lieb/Rosenberg**

**Unit ID** /repositories/2/archival\_objects/99282

**Unit Date** 1977-1988

**Mixed Materials** 1 (box)

**Container** 2 (folder)

**Scope and Contents note**

#### **Revised McClare Manuscript Edited by Harold Morowitz and Shalid Khan**

**Unit ID** /repositories/2/archival\_objects/99283

**Unit Date** undated

**Mixed Materials** 1 (box)

**Container** 3 (folder)

**Scope and Contents note**

#### **Revised McClare Manuscript**

**Unit ID** /repositories/2/archival\_objects/99284

**Unit Date** undated

**Mixed Materials** 1 (box)

**Container** 4 (folder)

**Scope and Contents note**

#### **Manuscript of Book: Colin F. McClare, Preface to pg. 90, notes**

**Unit ID** /repositories/2/archival\_objects/99285

**Unit Date** undated

**Mixed Materials** 1 (box)

**Container** 5 (folder)

**Scope and Contents note**

#### **Manuscript of Book: Colin F. McClare, pages 91-150, notes**

**Unit ID** /repositories/2/archival\_objects/99286

**Unit Date** undated

**Mixed Materials** 1 (box)  
**Container** 6 (folder)  
**Scope and Contents note**

**Manuscript of Book: Colin F. McClare, pages 151-193**

**Unit ID** /repositories/2/archival\_objects/99287

**Unit Date** undated

**Mixed Materials** 1 (box)

**Container** 7 (folder)

**Scope and Contents note**

**Manuscript of Book: Colin McClare, pages 194-250**

**Unit ID** /repositories/2/archival\_objects/99288

**Unit Date** undated

**Mixed Materials** 1 (box)

**Container** 8 (folder)

**Scope and Contents note**

**Manuscript of Book: Colin McClare, pages 251-325**

**Unit ID** /repositories/2/archival\_objects/99289

**Unit Date** undated

**Mixed Materials** 1 (box)

**Container** 9 (folder)

**Scope and Contents note**

**Manuscript of Book: Colin McClare, pages 326-369**

**Unit ID** /repositories/2/archival\_objects/99290

**Unit Date** undated

**Mixed Materials** 1 (box)

**Container** 10 (folder)

**Scope and Contents note**

**Manuscript of Book: Colin F. McClare, pages 370-421**

**Unit ID** /repositories/2/archival\_objects/99291

**Unit Date** undated

**Mixed Materials** 2 (box)

**Container** 1 (folder)

**Scope and Contents note**

**Manuscript of Book: Colin F. McClare, pages 422-526**

**Unit ID** /repositories/2/archival\_objects/99292

**Unit Date** undated

**Mixed Materials** 2 (box)

**Container** 2 (folder)

**Scope and Contents note**

**Manuscript of Book: Colin F. McClare, notes**

**Unit ID** /repositories/2/archival\_objects/99293

**Unit Date** undated

**Mixed Materials** 2 (box)

**Container** 3 (folder)

**Scope and Contents note**

**Chemical Machines, Maxwell's Demon and Living Organisms**

**Unit ID** /repositories/2/archival\_objects/99294

**Unit Date** undated

**Mixed Materials** 2 (box)

**Container** 4 (folder)

**Scope and Contents note**

**Manuscript**

**Unit ID** /repositories/2/archival\_objects/99295

**Unit Date** undated

**Mixed Materials** 2 (box)

**Container** 5 (folder)

**Scope and Contents note**